VENTURA RIVER PROJECT, CALIFORNIA

HEARING

BEFORE THE

SUBCOMMITTEE ON IRRIGATION AND RECLAMATION

OF THE

COMMITTEE ON INTERIOR AND INSULAR AFFAIRS HOUSE OF REPRESENTATIVES

EIGHTY-FOURTH CONGRESS

FIRST SESSION

ON

H. R. 3427 and H. R. 3488

TO AUTHORIZE THE SECRETARY OF THE INTERIOR TO CONSTRUCT, OPERATE, AND MAINTAIN THE VENTURA RIVER RECLAMATION PROJECT, CALIFORNIA

JUNE 21, 1955

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VENTURA RIVER PROJECT, CALIFORNIA

TUESDAY, JUNE 21, 1955

HOUSE OF REPRESENTATIVES,
SUBCOMMITTEE ON IRRIGATION AND RECLAMATION OF THE
COMMITTEE ON INTERIOR AND INSULAR AFFAIRS,
Washington, D. C.

The subcommittee met, pursuant to call, at 10:05 a. m., in the committee room, New House Office Building, Hon. Wayne N. Aspinall (chairman of the subcommittee) presiding.

Mr. ASPINALL. The Subcommittee on Irrigation and Reclamation of the Committee on Interior and Insular Affairs will now be in session for the consideration of H. R. 3427, by Congressman Engle, the chairman of the full committee, H. R. 3488, an identical bill, by Congressman Teague, of California.

At this time the Chair would ask unanimous consent to have the bill H. R. 3488, by Congressman Teague, printed in the record. Hearing no objection, it is so ordered.

(H. R. 3488 follows:)

[H. R. 3488, 84th Cong., 1st sess.]

A BILL To authorize the Secretary of the Interior to construct, operate, and maintain the Ventura River reclamation project, California

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That, for the purpose of supplying water for the irrigation of lands in Ventura County, California, and for municipal, domestic, and industrial use therein, and for other incidental beneficial purposes, the Secretary of the Interior is authorized to construct, operate, and maintain the Ventura River reclamation project comprising, as its principal works, Casitas Dam and Reservoir on Coyote Creek, Robles diversion dam on Ventura River, a canal to carry water from the Robles diversion dam to Casitas Reservoir, and other conduits and related facilities to deliver water to the lands and area to be served by the project.

SEC. 2. (a) In constructing, operating, and maintaining the Ventura River project, the Secretary shall be governed by the Federal reclamation laws (Act of June 17, 1902, 32 Stat. 388, and Acts amendatory thereof or supplementary thereto) except as is otherwise provided in this Act.

(b) In furnishing water for irrigation and for municipal, domestic, and industrial uses from the Ventura River project the Secretary shall charge rates with the objective of returning to the United States during a fifty-year payment period all of the costs incurred by it in constructing, operating, and maintaining the project which the Secretary finds to be properly allocable to the purposes aforesaid and of interest, as hereinafter provided, on the portion of the construction cost which is allocated to municipal, domestic, and industrial water.

(c) Any contract entered into under section 9, subsection (d), of the Reclamation Project Act of 1939 (53 Stat. 1187, 1193, 43 U. S. C., sec. 485 (h)) for payment of those portions of the costs of constructing, operating, and maintaining the Ventura River project which are allocated to irrigation and assigned to be paid by the contracting organization may provide for the repayment of the portion of the construction cost of the project assigned to any project contract unit or, if the contract unit be divided into two or more irrigation blocks, to any

such block over a period of not more than fifty years or as near thereto as is consistent with the adoption and operation of a variable payment formula which, being based on full repayment within the period stated under normal conditions, permits variance in the required annual payments in the light of economic factors pertinent to the ability of the organization to pay.

(d) Notwithstanding any other provision of law to the contrary, all net revenues derived by the Secretary from the furnishing of water for municipal, domestic, and industrial use shall be applied first to the amortization of that portion of the cost of constructing the Ventura River project which is allocated to that purpose with interest on the unamortized balance thereof at the average rate (which rate shall be certified by the Secretary of the Treasury) paid by the United States on its marketable long-term securities outstanding on the date of this Act and thereafter to the amortization of that portion of the cost of constructing the project which is allocated to irrigation but which is beyond the ability of the irrigation water users or their contracting organization to repay as provided above.

(e) The Secretary is authorized, subject to such rules and regulations as he may prescribe, to turn over to any contracting organization or to an organization which is designated by it for that purpose and which is satisfactory to the Secretary the care, operation, and maintenance of such portions of the Ventura River project as are used solely or principally for the benefit of that organization.

(f) Minimum basic facilities may be provided for the accommodation of the visiting public at Casitas Dam and, if responsible local interests agree to assume the operation and maintenance thereof, at the project reservoirs. The costs of such facilities shall be nonreimbursable.

SEC. 3. There is hereby authorized to be appropriated for construction of the Ventura River project the sum of $27,600,000 plus such amounts, if any, as may be required by reason of changes in construction costs as may be indicated by engineering cost indices applicable to the types of construction involved herein and, in addition thereto, such sums as may be required to operate and maintain the project.

Mr. ASPINALL. The Chair would make the further unanimous-consent request to have the report from the Department, under date of June 13, 1955, which bears the statement, "The Bureau of the Budget has advised that there would be no objection to the submission of this report to your committee," signed by Fred G. Aandahl, Acting Secretary of the Interior, made a part of the record.

Hearing no objection, it is so ordered.

(The report referred to follows:)

DEPARTMENT OF THE INTERIOR,
OFFICE OF THE SECRETARY,
Washington 25, D. C., June 13, 1955.

HON. CLAIR ENGLE,
Chairman, Commitee on Interior and Insular Affairs,
House of Representatives, Washington, D. C.

MY DEAR MR. ENGLE: You have requested from us a report on H. R. 3427 and H. R. 3488, both of which are bills to authorize the Secretary of the Interior to construct, operate, and maintain the Ventura River reclamation project, California.

This Department's proposed planning report on the Ventura River project (a copy of which is attached for your information) was sent on March 16 to the State of California and to the interested Federal agencies for review under the Flood Control Act of 1944, the act of August 14, 1946, and outstanding interagency agreements. Until their comments have been received and reviewed, we will not be in a position to make any firm recommendation with respect to enactment of these bills. We likewise defer until that time any recommendations for their amendment. This interim report, therefore, is confined to a summary statement concerning the nature of the proposed project, its cost, its economic feasibility, and its repayment prospects.

The Ventura project area, which encompasses the city of Ventura and a relatively long, narrow strip of land west of the city, is on California's southern coast in Ventura County, about 60 miles northwest of metropolitan Los Angeles. There has been a rapid expansion of population in the project area. The project

is multiple-purpose in character, involving primarily the storage of water from Ventura River and Coyote Creek in the proposed Casitas Reservoir for irrigation and municipal and industrial water. In addition, it would provide important fish and wildlife and recreational benefits and incidental flood control benefits.

Rainfall is deficient in the project area during the growing season. Runoff of streams is erratic and the area is subjected to prolonged droughts. Many of the lands currently irrigated experience serious shortages of water. The city of Ventura has outgrown a reliable water supply and is now frequently forced to pump water from three wells located along the ocean front which are subject to salt-water intrusion. There is, in short, in short, need for stream regulation to provide additional water to stabilize the present economy, to irrigate new lands, to supply new industries, and in general to provide for a rapidly expanding economy.

The proposed project would aid the general situation by providing an addition to the area's water supply of 27,800 acre-feet annually, including 800 acre-feet to be obtained from the existing Matilija Reservoir. It is estimated this supply will be adequate to supply area needs during the 50 years following initial operation of the project.

During the first 50-year period of project operation it is estimated that 60 percent of the total water made available would be used for irrigation and 40 percent for municipal and industrial purposes. At the end of the first 20-year period of project operation it is estimated that maximum irrigation development will have been reached and 15,000 acre-feet will be needed at that time for that purpose. At the same time 5,000 acre-feet would be utilized for municipal and industrial purposes. Urban and industrial water use would continue to increase and use for irrigation would gradually decrease until at the end of a 50-year period 15,600 acre-feet would be used for municipal and industrial purposes and 12,400 acre-feet for irrigation. Lands to be served by the project consist of about 20,200 acres. Under full development it is estimated that 12,600 acres would be irrigated and 7,600 acres would be utilized for municipal and industrial development. Under present conditions about 4,000 acres are irrigated; approximately 5,900 acres are developed for urban and industrial uses; and over 10,300 acres are used for grazing, are dry farmed or are idle.

The project facilities that would be constructed by the Federal Government are Casitas Dam and Reservoir on Coyote Creek, a tributary to the Ventura River; Robles diversion dam on the Ventura River; Robles-Casitas Canal; and the main conduit system consisting of 33 miles of pipelines, 7 pumping plants, and 6 balancing reservoirs. The Robles diversion dam would divert surplus flows through the Robles-Casitas Canal for storage and regulation in the Casitas Reservoir. Water would be released as required from the reservoir into the main conduit system for delivery to distribution systems. Some of the distribution facilities are existing; others needed would be constructed by the water users and would not be financed by Federal funds. Operation of the existing Matilija Reservoir located upstream on the Ventura River would be coordinated with operation of Casitas Reservoir.

Based on the contemplated development, full use of the water that would be made available by construction of the recommended project would not be realized for a number of years after completion of the project works. As a result, the possibility of initial construction of a smaller dam and reservoir with provision for future enlargement as water needs increased was investigated. After careful consideration of the technical and economic factors involved, it was concluded that initial construction of a reservoir of 250,000 acre-feet capacity is the most desirable plan. Other considerations such as the more rapid growth of the project area than contemplated, the probable extension of the service area boundaries, the probable future urban and suburban expansion into nonirrigable foothill areas which areas have not been considered in the studies for future water requirements, and possible heavier industrial demands than estimated all tend to support the decision to construct initially to the 250,000-acre-foot capacity.

The cost of the Ventura River project based on January 1954 prices, which are approximately the same as current prices, is estimated to be $27,669,000, including $169,000 for minimum recreation facilities as estimated by the National Park Service. The $169,000 figure includes $67,500 for the acquisition of 675 acres of land required for minimum basic facilities in addition to land otherwise to be acquired for project purposes. Further detailed studies, in accordance with the act of August 14, 1946 (60 Stat. 1080), remain to be made of the fish and wildlife resources affected by the project and of measures

required for their preservation and propagation. The cost of these measures is not included in the above estimate.

The $27,669,000 project construction costs tentatively are allocated to municipal and industrial water, to irrigation and to recreation in the amoonts of $11,403,000, $15,319,000, and $169,000, respectively. The balance of $778,000 has been or is now being contributed by the Ventura River Municipal Water District for preliminary and advanced planning for the project.

Studies indicate that project revenues from the sale of irrigation and municipal and industrial water together with receipts from an ad valorem tax levy in the project area would repay the municipal and industrial water allocation at 2.5 percent interest in 40 years and the irrigation allocation in 50 years including a 10-year development period.

The ratio of direct benefits to project costs is 1.76 to 1 and the ratio of total benefits to cost is 4.25 to 1. For these ratios, the benefits for an acre-foot of municipal and industrial water were assumed equal to the benefits for an equivalent amount of irrigation water. Even if municipal and industrial water benefits are said to be measured by the cost of the cheapest alternative method of providing an equivalent water supply the total project benefits would be well in excess of project costs with a benefit-cost ratio for municipal and industrial water of about 1.4 to 1 and a ratio of direct irrigation benefits to costs of 1.56 to 1.

The Bureau of the Budget has advised that there would be no objection to the submission of this report to your committee.

Sincerely,

FRED G. AANDAHL,
Acting Secretary of the Interior.

Mr. ASPINALL. I would also ask unanimous consent that a letter from Fred G. Aandahl, Assistant Secretary of the Interior, under date of June 20, 1955, supplementing the report just referred to be made a part of the record.

Hearing no objection, it is so ordered.

(The letter referred to follows:)

DEPARTMENT OF THE INTERIOR,
OFFICE OF THE SECRETARY,
Washington, D. C., June 20, 1955.

HON. CLAIR ENGLE,
Chairman, Committee on Interior and Insular Affairs,
House of Representatives, Washington, D. C.

MY DEAR MR. ENGLE: We have been requested by Congressman Charles M. Teague to inform the Committee on Interior and Insular Affairs of the current status of our planning report on the Ventura River project, California. On June 13, 1955, we sent you our interim report on the bills (H. R. 3427 and H. R. 3488) to authorize the Secretary of the Interior to construct, operate, and maintain the Ventura River reclamation project, California. The information contained therein will supplement that contained in our June 13 letter.

As stated in the June 13 letter, this Department's proposed planning report on the Ventura River project was sent to the State of California and interested Federal agencies. We have now received comments from various of the reviewing agencies. Copies of these comments are attached. On June 14, our planning report was transmitted to the Bureau of the Budget for advice concerning the relationship of the Ventura River project to the President's program.

Just as soon as comments are received from the Bureau of the Budget we will be in a position to send our final report to the Congress with firm recommendations in regard to authorization of the project.

Sincerely yours,

FRED G. AANDAHL,
Assistant Secretary of the Interior.

Mr. ASPINALL. I also make unanimous-consent request that a communication by the Department of the Interior under date of May 9, 1955, a communication from the Department of Agriculture, under date of May 27, 1955, a communication from the Federal Power Commission under date of June 9, 1955, a communication from the Department of Health, Education, and Welfare under date of April 27, 1955,

and a statement by the Department of Public Works of the State of California under date of April 1955, all relating to the legislation now before us be made a part of the file.

Hearing no objection, it is so ordered.

(The documents referred to will be found in the files of the committee.)

Mr. ASPINALL. The chair would also ask that a memorandum prepared by our committee staff under date of June 20, 1955, explaining the legislation be made a part of the record at this place.

Hearing no objection, it is so ordered.

(The memorandum referred to follows:)

MEMORANDUM BY COMMITTEE STAFF

JUNE 20, 1955.

Subject: H. R. 3427 and H. R. 3488, Ventura project, California.

PURPOSE

This bill would authorize the Secretary of the Interior to construct, operate, and maintain the Ventura River reclamation project, California. This is a multiple-purpose project involving primarily the storage of water from Ventura River and Coyote Creek for irrigation, municipal, and industrial uses. In addition, there will be important fish and wildlife, recreational, and incidental flood-control benefits.

BACKGROUND

The Ventura project area is on California's southern coast, in Ventura County, about 60 miles northwest of Los Angeles. The area is composed of mountains of the coastal range and the valley of Ventura River and its tributaries. The people to be benefited by the project are represented by the Ventura River Municipal Water District, which covers the project area. They have recognized the importance of this project to their welfare and to the economy of the area and have cooperated wholeheartedly during the investigation period. Local interests have contributed one-half of the funds required for the project investigations and preparation of the planning report. They also have entered into a contract with the Federal Government to furnish funds for advance planning for the project, including the preparation of detailed designs and estimates. This contribution by the local interests amounts to $778,000 and indicates the intense interest of these local people in getting this project underway.

NEED

Development of an additional firm water supply is urgently needed in the Ventura River project area for stabilization of present agricultural and other economic activities and for the development of new irrigated lands and the establishment of new industries needed to take care of the rapidly expanding population in the area. People are attracted to this area by its agricultural, industrial, and commercial opportunities and by its excellent climatic and scenic characteristics. However, rainfall is deficient during the growing season, runoff of the streams is erratic, and the area is subject to prolonged droughts. Many of the lands currently irrigated experience serious shortages of water. Also, the city of Ventura has outgrown a reliable water supply and is now frequently forced to pump water from wells located along the ocean front which are subject to salt-water intrusion.

ENGINEERING ASPECTS

The recommended plan for providing a water supply for the Ventura River project area includes a storage reservoir to conserve the erratic stream flows, diversion works and canal to divert Ventura River water into the reservoir and a conveyance system to convey the stored water to points of use. The storage capacity would be sufficient to hold water over a period of several dry years. The project facilities include the Casitas Dam and Reservoir located on Coyote Creek, with a capacity of 250,000 acre-feet, the Robles diversion dam on the Ventura River and the Robles-Casitas Canal to divert and convey Ventura

River water to the Casitas Reservoir and a conveyance system consisting of about 33 miles of pipelines, 7 pumping plants, and 6 balancing reservoirs. Water stored in the reservoir would be released as required into the main conveyance system for delivery to distribution systems serving the area. Some of the distribution facilities are existing—others would be constructed by the water users and would not be financed by Federal funds. The project facilities would be coordinated with existing water-control facilities in the area.

The project lands consist of about 20,200 acres. Under full development, it is expected that about 12,600 acres would be irrigated and 7,600 acres would be utilized for municipal and industrial development. This compares with present conditions where about 4,000 acres are irrigated, about 5,900 acres are developed for urban and industrial uses, and about 10,300 acres are used for grazing, dry farms, or are idle.

FINANCIAL ASPECTS

The cost of the Ventura River project is currently estimated to be about $27,669,000. Of this amount, only $169,000, which is for recreational facilities, would be nonreimbursable. The reimbursable cost amounts to $26,722,000, of which $15,319,000 is allocated to irrigation and $11,403,000 is allocated to municipal and industrial water supply. The remaining $778,000 is not a Federal cost as it is being contributed by the Ventura River Municipal Water District. Under the repayment plan proposed by the Department, project revenues from the sale of irrigation and municipal and industrial water, together with receipts from an ad valorem tax levy in the project area, will repay the municipal and industrial water allocation at 2½-percent interest in 40 years and the irrigation allocation in 40 years plus a 10-year development period.

The Ventura project is also an excellent one from the standpoint of economic justification. The benefit-cost ratio of the project is 4.25 to 1 if all benefits are considered and 1.76 to 1 if only the direct benefits are considered.

Mr. ASPINALL. At this time the Chair recognizes the chairman of the full committee, Mr. Engle, of California.

Mr. ENGLE. Mr. Chairman, I will reserve such comments as I have to make until a later time in deference to those people who are here from California to testify on this project. This delegation came back here to appear before the Senate committee, and this hearing was arranged in order to enable them to put their case in before the House committee without making a second trip.

I have introduced a bill similar to that of Mr. Teague. The project is in his district. I did it at his request and at the request of some of the people in his area with whom I had worked on the Santa Maria project some years ago. However, I will request the committee to proceed on Mr. Teague's bill and to consider it, and at an appropriate time I will ask to have my own bill tabled.

This is a good project, and I am glad to be associated with my friend from California, Mr. Teague, in it. He has been very industrious and persistent in trying to get consideration of this project.

Finally, Mr. Chairman, I would like to say that I have to appear before the Senate Appropriations Committee later this morning and for that reason I will have to leave the committee, but I would not want my absence here to indicate any lack of interest in this testimony or in this project.

With that brief preliminary statement, I would like to reserve my comments for a later time.

Mr. UTT. Will the chairman yield to me for a moment?

Mr. ENGLE. Yes.

Mr. UTT. I would like to express my personal appreciation to the chairman of the full committee on his generosity in permitting the consideration of Congressman Teague's bill. It is the prerogative of the chairman to have his own bill considered, and I think it is a mark

of fine statesmanship to permit a Congressman from his own district to have his bill considered. You extended the same courtesy to me last year in the Fallbrook bill, which was probably the most important bill I had last year. I again express appreciation to you for letting me pass my bill instead of yours, and also in this case in permitting Mr. Teague to have his bill considered instead of that of the chairman.

Mr. ASPINALL. The committee is glad to welcome before it this morning Congressman Charles M. Teague, of California, whose bill is now before this committee.

Congressman Teague, may the chairman of this subcommittee state that you have been very patient and very understanding in your requests for a hearing, and we are glad we are able to hear you and your constituents this morning.

You may proceed.

STATEMENT OF HON. CHARLES M. TEAGUE, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF CALIFORNIA

Mr. TEAGUE. Mr. Chairman and members of the committee, first let me say that my statement will be very brief. Secondly, let me thank you and the gentleman from California, Mr. Engle, for your courtesy and kindness and cooperation in fitting this hearing into your very busy schedule in order to accommodate our visitors from California. We are all very grateful to you.

I, of course, wish also to express my appreciation to the gentleman from California, Mr. Engle, for the thoughtfulness which he just expressed in allowing my bill to be considered. That is somewhat contrary to the custom, and I think it is a very fine and generous gesture on his part, and I am certainly grateful to him.

I am going to say just this about this project, because all the technical aspects, the advantages, will be covered by witnesses from the Bureau and from my own area in California.

I should like to point out to the committee, however, that the water district which was formed in that area, the Ventura River Municipal Water District, has expended or will shortly expend, is committed to expend close to $1 million for preplanning and preconstruction work, which to me is a very important indication of the earnestness of the people in that area in trying to bring about the successful conclusion of this proposed project.

Secondly, I should like to point out to the committee that I have received many, many communications, which I will offer for the record in a few moments, from all sorts of groups in my district, granges, labor organizations, chambers of commerce, and service clubs, and individuals, all in support of this project.

I received only one letter, a somewhat mild one, several months ago—only one—questioning the wisdom of this project. I mentioned that so you gentlemen will realize in our district out there, in this district covered by the Ventura River Municipal Water District, we have a united front and a situation where we have full local cooperation.

That is all I am going to say, gentlemen, except to introduce, if I may do so at this time, unless you would rather I do it later, these resolutions and letters I have received from people in the district and organizations urging that this project be reported favorably.

Mr. ASPINALL. Mr. Teague, do you have any particular desire that they be made a part of the record instead of the file?

Mr. TEAGUE. No, I do not. I do not think that is necessary, Mr. Chairman.

Mr. ASPINALL. If it is all right with you, we will have them documented and reference made to them by our staff member, and then they will be placed in the file.

Mr. TEAGUE. With one exception. I would like very much to have a letter, which I will not read in the interests of time, a letter which I received just within the last few days from Gov. Goodwin J. Knight, of California, expressing his interest in the project, stating his familiarity with it, and urging that favorable action be taken—I would like to have that letter from Governor Knight placed in the record, if I may, please.

Mr. ASPINALL. Do you wish to have the right to place in the record of the hearings a further statement on your part?

Mr. TEAGUE. Yes; I would like to reserve that right, if I may, please.

Mr. ASPINALL. With that understanding, that the gentleman from California, Mr. Teague, has the right to place a further statement in the record, together with the letter signed by the Governor of California, unless there is objection, it will be so ordered.

Hearing no objection, it is so ordered.

Reference will be made to the other material, and it will be documented and placed in the file.

Mr. TEAGUE. Thank you, sir.

(The letter and statement referred to follow, and the other documents will be found in the files of the committee.)

STATE OF CALIFORNIA,
GOVERNOR'S OFFICE,
Sacramento, June 14, 1955.

Hon. CHARLES M. TEAGUE,
Member of Congress,
House Office Building, Washington, D. C.

DEAR CONGRESSMAN TEAGUE: I have learned that the subcommittee of the Senate Interior and Insular Affairs Committee plans a hearing June 22 on the Ventura River project calling primarily for storage of water from the Ventura River and Coyote Creek in the proposed Casitas Reservoir for irrigation and municipal and industrial use. I also have learned that a similar House committee hearing is pending.

In view of the urgent and immediate need for supplementary water in the Ventura River Basin, I hope that you will give your support to this project and that you will urge that appropriation be made for construction at the earliest practicable date.

I further urge that the capacity of the reservoir to be constructed meet with the desires of the board of directors of the Ventura Municipal Water District, which is acting for the taxpayers of the district in seeking full, practicable development of its water resources.

I know that the proponents of the project are desirous of starting construction at the earliest possible date in view of the urgency of the situation in Ventura County, and I join them in expressing the hope that the present session of Congress will act favorably upon their request.

With the kindest personal regards.

Cordially,

GOODWIN J. KNIGHT, *Governor.*

Mr. TEAGUE. Mr. Chairman, I should like to say this also: I live in this area. I am not a property owner there so I have no direct benefit, but I am well aware of the urgency of the water shortage, which

will be covered and touched on more fully by later witnesses, and I have personal knowledge of the serious critical situation.

Now, Mr. Chairman, I would like to merely introduce the gentlemen who have come all the way from California. Only two of them will make statements at a later time, but I should like to have you know who they are in the event there are any specific questions you may have later touching on the specific fields these people will cover.

Mr. George Purvis, who is president of the Ventura River Municipal Water District, and who will testify; Mr. Robert Willard, who is counsel for the district; Mr. Charles Petit, mayor of the city of Ventura, which is the principal city involved within the district; Mr. Neil Ensch, who is a leading agriculturalist in the district, and who will testify briefly; Dr. Thomas Bailey, who is a very well-known engineer and geologist in our area; Mr. Leland Bennett, who is secretary-manager of the district; Mr. Roy Pinkerton, editor and publisher of the Ventura County Free Press, the leading newspaper, the largest newspaper in the district; Dr. J. S. Flynn, who is a director of the Ventura River Municipal Water District.

I believe that is all. You will hear from two of these gentlemen later.

Thank you again for your courtesy and kindness.

Mr. ASPINALL. Thank you very much.

May the Chair welcome you gentlemen to this committee as well as to our National Capital. The Chair remembers with continuing pleasure the trip that he had with some of you men last December. It was a fine experience, and I have been in hope ever since that visit we would have this legislation before the committee for consideration.

Our time is limited, and I understand that the Bureau witnesses can put on their testimony in 20 minutes. Is that right, Mr. Dexheimer?

Mr. DEXHEIMER. Yes, sir.

Mr. ASPINALL. Questioning on that testimony will take 30 minutes, and the representatives who are to testify from the district can take 20 minutes in testimony, and questions thereon will take 30 minutes.

Does the committee understand what the Chair is requesting? That we proceed to hear the Bureau representatives for 20 minutes, then question them for 30 minutes, then hear the men from Ventura for 20 minutes and question them for 30 minutes this morning.

Is there any objection to that procedure?

Hearing none, it is so ordered.

At this time the Chair calls upon Mr. Dexheimer and Mr. Hamilton to take the witness chairs and make their formal statements.

STATEMENTS OF W. A. DEXHEIMER, COMMISSIONER, BUREAU OF RECLAMATION; AND JOHN S. HAMILTON, CHIEF, DEVELOPMENT DIVISION, SANTA BARBARA PROJECTS OFFICE, BUREAU OF RECLAMATION, DEPARTMENT OF THE INTERIOR

Mr. DEXHEIMER. Mr. Chairman, and members of the committee, it is a pleasure to appear before you again to present information on the potential Ventura River project, California. As yet, we are not in a position to submit a planning report on the project with final recommendations but hope to do so in the near future. The report of the

Department of the Interior is currently being considered by the Bureau of the Budget. Until we receive that agency's comments and the report is transmitted to the Congress, we will not be in a position to officially present the administration's views. We can, however, present information on the results of our studies to date and we have with us Mr. John S. Hamilton, Chief, Development Division, Santa Barbara Area Projects Office, Goleta, Calif., to present technical details on the plan of development and to provide other information that members of the committee may desire.

The Ventura project is located on the southern coast of California in the general vicinity of the city of Ventura. The area concerned is composed of the valley of the Ventura River and its tributaries including the city of Ventura and a relatively long, narrow strip of land extending along the coast west of the city.

This is a multiple-purpose project primarily for irrigation and municipal and industrial water supply. Our investigations were initiated on a cooperative basis at the request of the inhabitants of the area. So anxious are these people to obtain this project at the earliest possible time, they have furnished in addition to matching funds for the feasibility investigations all of the funds so far used for advanced planning. By the time the advanced planning and preconstruction activities are completed, they will have furnished over three-quarters of a million dollars of their own funds for project investigations and plans. This is truly an outstanding record of local interest and participation.

The project facilities that are proposed for construction by the Federal Government are principally Casitas Dam and associated diversion and conveyance works. New distribution system facilities required would be constructed by the water users. The project facilities would provide 27,800 acre-feet of additional water supply annually on a firm basis to meet the area's needs.

The estimated cost of the proposed Federal works is $27,699,000, including $778,000 being contributed by the water users for planning and preconstruction purposes. All of the Federal investment would be reimbursable except $169,000 for minimum basic recreation facilities which could be nonreimbursable. Ad valorem taxes collected by the local municipal water district would be used to supplement the revenues received from the water users in meeting the repayment schedules. The $11,403,000 allocated to municipal and industrial water supply would be repaid to the Treasury at 2½-percent interest in 40 years after construction. The $15,319,000 allocated to irrigation would be repaid without interest in 40 years following a 10-year development period. Revenues from sale of municipal and industrial water would assist in the return of costs allocated to irrigation after repayment of the costs allocated to municipal and industrial water.

Continuing studies, as contemplated in our planning report, will probably show that a repayment schedule with smaller initial payments and graduated increases, based primarily on the estimated water use over the repayment period, in lieu of the equal annual amounts shown in the report, with certain prescribed minimum annual payments, will be more acceptable to the contracting agency. I am confident that a satisfactory contract can be negotiated. Benefits exceed costs in the ratio of 4.25 to 1.

The Ventura project has all of the essentials of a successful reclamation undertaking. There is urgent need for this development to meet expanding requirements for municipal, industrial, and agricultural water in the rapidly growing project area. Estimated benefits exceed estimated costs by a wide margin, full repayment of reimbursable costs within a 40-year period is in prospect, and there is exceptionally strong local interest and support for the project and willingness to assume financial responsibility. The Ventura project will make a valuable contribution to the economic development of the West and the Nation as a whole.

Mr. Hamilton now has a statement on the technical details, if you are willing to proceed with that.

Mr. ASPINALL. Proceed, Mr. Hamilton. Mr. Dexheimer has taken about 4½ minutes.

Mr. HAMILTON. Thank you, sir.

My name is John S. Hamilton. I am Chief of the Development Division, Santa Barbara Area Projects Office, in Goleta, Calif. It was in that office that the original report was prepared.

Mr. Chairman, I would like to request your permission to submit a written statement for the record and further permission to make some oral remarks from notes.

Mr. ASPINALL. Do you have your written statement here?

Mr. HAMILTON. We have it here.

Mr. ASPINALL. That will be permissible. Is this [indicating] the written statement to which you refer?

Mr. HAMILTON. Yes, sir.

Mr. ASPINALL. With the understanding that the coloring on the maps will not be duplicated for our record, the statement will be accepted and the maps will be handled in the usual manner.

If there is no objection, it is so ordered.

(The statement referred to follows:)

STATEMENT OF JOHN S. HAMILTON, UNITED STATES BUREAU OF RECLAMATION

My name is John S. Hamilton. I am Chief of the Development Division, Santa Barbara Area Projects Office, Bureau of Reclamation, at Goleta, Calif. The detailed studies and initial draft of the feasibility report on the Ventura River project now under consideration by your committee were prepared in that Office.

The Ventura River project is a proposed multiple-purpose development that will create economic opportunities for the Ventura River area of southern California and provide optimum conservation and utiiization of the water and related resources of the Ventura River Basin. This project, as shown on the frontispiece, involves essentially the same area as that of the Ventura River Municipal Water District and is situated in Ventura County on California's southern coast about 60 miles northwest of Metropolitan Los Angeles. This development is needed to meet present water shortages and future requirements of an area considered in the report of the Secretary of the Interior on the Ventura River project that includes some 20,000 acres of irrigable, urban, and industrial lands within the boundaries of the Ventura River Municipal Water District. Subsequent to the completion of that report about 1,000 acres of additional irrigable land have been annexed to the district. Since this addition will increase the ultimate water requirements by only 5 percent, the following project information is based on the project area covered in the report as submitted to you by the Secretary of the Interior. No significant changes in project plan will be required in order to serve this area.

The investigations of the area's water problems leading to this proposed project and looking toward early construction of the needed water-supply facilities were made at the request of and in cooperation with the Ventura River Municipal Water District and represent an outstanding example of local participation in water-resource development. The report of the Secretary of the Interior, pre-

pared in accordance with Federal reclamation laws, recommends the construction of a storage reservoir, diversion works, and a conveyance system, all at an estimated cost of $27,500,000, which, when integrated operationally with existing water-supply facilities, will assure the area of a dependable supply to meet its needs. Of this $27,500,000 estimated cost, the district has already paid one-half the cost of the feasibility investigation and is currently paying all of the cost of the preconstruction work by the Bureau of Reclamation leading to and including the preparation of plans and specifications, at a total cost to the district of $778,000. The estimated primary benefits to be obtained by the construction of these new works will exceed costs in the ratio of 1.76 to 1; on the basis of total benefits, the ratio would be 4.25 to 1. All of the costs of the project are reimbursable, with the exception of $169,000 not included in the above total for minimum recreational development. Those portions of project costs allocated to municipal and industrial water service would be repaid with interest on the invested capital. This interest would be returned to the Federal Treasury and would not be credited to the repayment of the irrigation allocation.

THE SETTING

Essentially, the Ventura River Basin is composed of rugged mountains of the coast range, with elevations up to 6,000 feet above sea level, 1 main river valley, the Ventura River, and several side valleys which were formed by streams tributary to it. Included also in the project area is a relatively long, narrow strip extending along the coast west of Ventura, lying outside but contiguous with the drainage area of the Ventura River, as well as an area recently annexed to the district in the extreme westerly portion.

The Ventura River is the major stream in the area. It flows about 16.5 miles through the Ventura River Valley from its formation at the confluence of Matilija and North Fork Matilija Creeks to its mouth at the Pacific Ocean near the westerly edge of the city of Ventura. Its two principal tributaries, in addition to Matilija and North Fork Matilija Creeks, are San Antonio Creek, which flows in from the east draining Ojai, upper Ojai, and San Antonio Creek valleys, and Coyote Creek, which enters from the west after flowing through Santa Ana Valley.

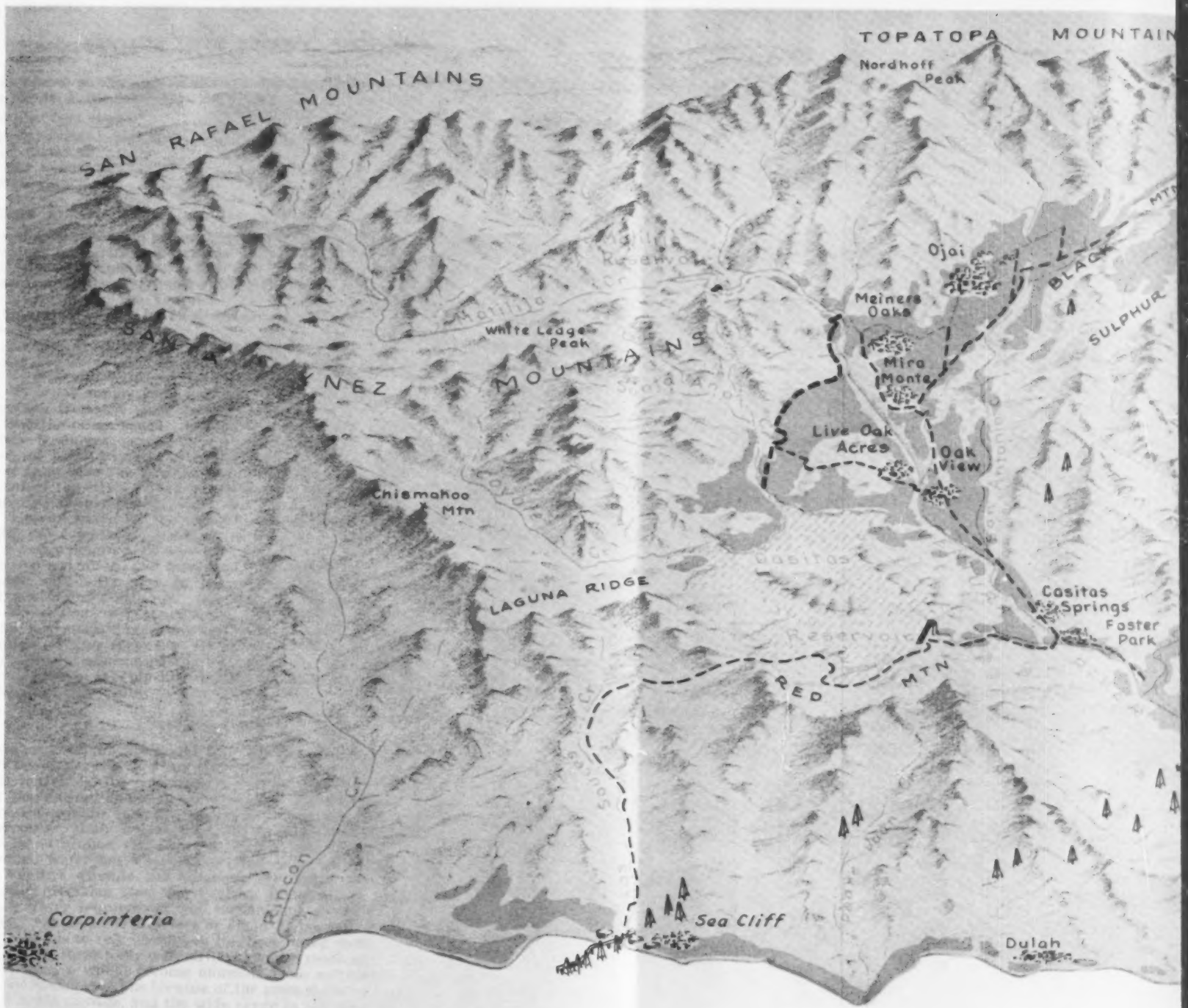
As is typical of the coastal region of southern California, the project area has a mild climate with a long, dry, warm summer season and a shorter, wet winter period accompanied by cooler temperatures. The mean seasonal precipitation, 75 percent of which occurs during the months of December through March, varies from a minimum of about 15 inches at Ventura on the coast to 32 inches in the mountains. Temperatures average about 61° F. but range considerably above and below that figure, particularly in the more inland areas. The proximity of the project area to the ocean provides a moderating effect on the climate, with considerable fog along the coast and above-freezing temperatures all year long except in certain valley pockets. This favorable climate creates a long growing season. Some of the crops are raised during the entire year. The absence of a snow pack and a wide variation in both monthly and annual rainfall result in streamflows of widely fluctuating magnitude.

Transportation and communication facilities for the area are excellent.

Today, the area's principal economic development is centered around agriculture and processing of agriculture crops, oil and gas production, and commercial, service, and recreational activities. The agricultureal industry includes both irrigated and dry farming, together with processing of farm products. Oranges, lemons, walnuts, avocados, deciduous fruits, irrigated hay and pasture, and vegetables are the principal irrigated crops. Dry-farmed crops include grain, hay, barley, beans, nuts, deciduous fruits, and grapes. Three major and several minor oilfields are in production with the largest, the Ventura Avenue oilfield, ranking second in the State in the quantity of crude oil produced. Various important industries serve the oil and gas production industry directly and indirectly.

PRESENT DEVELOPMENT OF LAND AND WATER RESOURCES

Within the boundaries of the Ventura River project are about 21,170 acres of arable land, including 1,050 acres recently annexed to the project area in the extreme westerly portion of the district. Most of this land lies in the Ojai and upper Ojai valleys; the remainder borders the Ventura River, its tributaries, and the ocean shore. The city of Ventura, which is part of the district area, is expanding rapidly to the east of the district and looks to the Ventura River Municipal Water District for future water supplies to sustain this expansion.



VENTURA RIVER PROJECT

1954

TOPATOPA MOUNTAINS
Nordhoff Peak
MTN
Ojai
BLACK
MTN
Santa Paula
Meiners Oaks
SULPHUR
Mira Monte
Oak Acres
Oak View
Casitas Springs
Foster Park
MTN
Chrisman
VENTURA
Dulah
OCEAN
PACIFIC

767-208-25

The present use of the land within the district, exclusive of the Rincon annexation, is shown in the following tabulation:

Present land use	*Acres*
Grazing, dry-farmed, and idle	10,290
Irrigated farms	3,960
Urban and suburban	5,600
Industrial	270
Total arable	20,120

The water used for the presently irrigated lands, as shown in green on plate 1, is obtained primarily by pumping from ground-water basins, including stream gravels. A smaller quantity is diverted by gravity directly from streamflows. The largest quantity of ground-water pumping occurs in the Ojai Valley, with smaller quantities in the Ventura River Valley, and negligible amounts along the tributary streams. In 1953 an estimated 9,200 acre-feet of water were obtained for agricultural use.

Use of water for municipal and industrial purposes is concentrated laregly in the city of Ventura and its environs. The other towns and scattered industrial developments require a smaller quantity of water. The city of Ventura obtains its water supply from Ventura River near Foster Park both by gravity and pumping from the river gravels; in addition it has three relatively deep wells along the ocean beach. During 1953 a total of 6,250 acre-feet was taken from these 2 sources, nearly 80 percent of which was supplied from the river. In excess of 2,000 acre-feet of the city's total supply was used by the industrial area in or near the Ventura Avenue oilfield. Over the last 10 years nearly 15 percent of the city's supply has been used for irrigation below Foster Park. This quantity is included in the irrigation use indicated in the preceding paragraph. Use of water by the other towns, including the suburban areas and industrial developments, outside of the city of Ventura's service area is estimated to approximate 1,500 acre-feet annually.

Water for irrigation, and municipal, and industrial uses now is obtained and distributed within the area by individuals, the city of Ventura, and several other types of organizations. Included in this latter group is the Ventura County Flood Control District which owns and operates the existing Matilija Dam, the only storage reservoir in the Ventura River Basin, and a pipeline to Ojai Valley. Water from that reservoir of 7,000 acre-feet capacity is released either for replenishment of the ground-water basin along Ventura River or conveyed through the pipeline for agricultural use or for ground-water replenishment in Ojai Valley.

NEED FOR ADDITIONAL WATER

Development of an additional firm water supply is urgently needed in the Ventura River project area for stabilization of present agricultural and other economic activities, for new irrigated lands, for new industries, a rapidly expanding population, and for new economic opportunities. Present water supplies are inadequate both for agricultural use and for municipal and industrial purposes. Many irrigated areas now experience serious shortages including the lands around the edge of Ojai Valley normally adequately supplied from ground water but where wells went dry during the recent drought. The city of Ventura already has outgrown its water supply. Normally pumping and gravity diversion from the Ventura River supply about 6,000 acre-feet of the city's water requirement but the amount available from this source has dropped as low as 1,500 acre-feet or about 25 percent of the need. This means that the city has to rely heavily on its three beach wells, as a standby source of supply. When these wells were drilled about 6 years ago, it was known that this temporary source would become unusable from salt-water encroachment under continued pumpage. Thus because of the precarious supplemenental supply that the beach wells provide, and the wide range in the quantity obtainable from the river, the city of Ventura has an immediate need for a firm supplemental water supply.

In addition to the needs of the present irrigated area and those of the city of Ventura, the area above Foster Park and the coastal strip need more water for additional irrigation, and municipal and industrial developments. Within the project area this would include all presently dry-farmed or idle land that could be irrigated if a water supply were available, and used for expansion of existing

communities, and commercial and industrial activities. This expansion is continuing now and will continue in the future. Ventura County is receiving more than its proportionate share of the State's growing population. People are attracted by its close geographical location to the metropolitan centers of southern California, its agricultural, industrial, and commercial opportunities, and its moderate climate and scenic attributes. This recent population growth is exemplified by the city of Ventura which constitutes about 60 percent of the population within the project area, and which has increased in size from about 16,000 to 25,000 in the last 10 years. Studies made during this investigation indicate that during the next 50 years the population of the city may increase to more that 80,000, accompanied by rapid growth throughout the remainder of the project area. The growth in population as well as the increase in irrigated agriculture and industry is dependent, however, on the availability of an adequate supply of water, which need the Ventura River project would provide. In the future, if an adequate water supply is developed it is anticipated that 12,580 acres, including small suburban farm plots would be in irrigated agriculture and approximately 7,600 acres would be in municipal and industrial development including suburban uses having similar water requirement characteristics. As the city of Ventura continues to expand to the east, it is estimated that within 50 years an additional 5,000 acres will be served through water made available by the project. Crops expected to be grown in the future on the irrigated lands include citrus, avocados, walnuts, grapes, deciduous fruits, irrigated pasture, alfalfa, and truck crops.

The total supplemental water requirement estimated at the end of the 50-year period of analysis for agriculture, municipal, and industrial purposes would be about 28,000 acre-feet per year. In about 20 years the supplemental water requirement will total at least 20,000 acre-feet annually. It is estimated that by then the projected irrigated acreage which would use about three-fourths of the 20,000 acre-feet requirement will be fully developed. By the end of 50 years it is expected that municipal and industrial requirements will begin to exceed the use for irrigation. Averaged over the 50-year analysis period, however, irrigated agriculture would require approximately 60 percent of the total supplemental water supply while the municipalities and industries would take about 40 percent.

Considering the history of comparable areas, the potential for growth inherent in the project area, and the very rapid growth in other southern California areas when a water supply became available, the increase in use of water in the Ventura River project area may be even more rapid than anticipated. The probable extension of the service area boundaries, future use of lands that are not now considered usable, and possible heavier industrial demands are additional considerations indicating that the need for more water may become more acute even sooner than present estimates contemplate. Plate 2 depicts the estimated water demand buildup. The acreage and water requirement figures given above are those on which the recommended project was based. As mentioned on page 1, since that time the addition of 1,000 acres in the Rincon addition at the extreme westerly end of the district has increased the anticipated water demand by 1,400 acre-feet.

As illustrated by plate 3 the runoff of streams in the Ventura River Basin varies widely from year to year and is characterized by a series of drought years. Since the lower streamflows of the basin are presently being used and because of the extreme vagaries in streamflow, storage of water in reservoirs is permitted only during the high-flow periods. The intermittent occurrence or cyclic characteristics of high streamflows necessitates that the required reservoir capacity be constructed and placed in operation as rapidly as possible in order to take full advantage of whatever favorable runoff years may occur during the time that the buildup of the demand for use of water is taking place in the project area. This approach to timing of construction and operation is of prime importance in providing the needed opportunity for the storage of water that may become available during wet years in order that the probable safe yield available from the reservoir may meet the supplemental water requirements of the area. This is particularly important prior to the time the reservoir is completely filled for the first time. In the Ventura River Basin only one good site for a large reservoir exists, namely the Casitas site on Coyote Creek, a tributary of the Ventura River. Proper development of this site to meet the area's annual water needs of about 28,000 acre-feet would require the construction of a reservoir with a capacity of 250,000 acre-feet. A 250,000 acre-foot reservoir together with other project features would be mutually advantageous for provid-

ing both supplemental water for irrigation use and for additional municipal and industrial water supply. Dual purpose use of both the reservoir site and other necessary project facilities would make it possible to serve the area in the most economic and completely effective manner. Development of the only good storage site without full consideration of both irrigation and municipal and industrial water uses should not be undertaken as there are no alternative potential feasible developments within the area that could provide an alternative water supply in as economical a manner.

PLAN OF DEVELOPMENT

The recommended plan for providing a water supply for the Ventura River project area includes a storage reserve to conserve the erratic streamflows and hold water over a period of several dry years, diversion works to divert water into the reservoir, and a conduit system to convey the water to points of use. The project works necessary to accomplish these objectives are shown on plate 1 and include:

(*a*) Casitas Dam and Reservoir, impounding 250,000 acre-feet of water, located on Coyote Creek, a tributary of the Ventura River. The dam would be an earthfill structure rising about 275 feet above streambed and would have a crest length of 2,050 feet. Two small earthfill saddle dams having a maximum height of about 25 feet and a total combined crest length of about 1,215 feet also would be required.

(*b*) Robles diversion dam on the Ventura River to divert storable flows into the Robles-Casitas Canal would be a rockfill structure about 7 feet high and 450 feet long.

(*c*) Robles-Casitas Canal would carry Ventura River water from Robles diversion dam to Casitas Reservoir and comprises a concrete-lined canal section, a pipe section, and a rectangular chute section, with a capacity of 500 cubic feet per second and a combined length of about 5 miles.

(*d*) The main conduit system would convey the conserved water from Casitas Reservoir to the points of use and would involve 33 miles of pipelines with capacities ranging from about 80 to 3 cubic feet per second. Also required in the main conduit system would be 7 pumping plants with total dynamic heads of 150 feet to 930 feet and capacities of 52 cubic feet per second to 3 cubic feet per second, and 6 balancing reservoirs with capacities of 20 to 80 acre-feet.

In addition to the foregoing works, an irrigation distribution system would be required to distribute the water from the major delivery points to actual places of use. A portion of this system is existing and as now planned, the necessary additions would be constructed over a period of several years by the Ventura River Municipal Water District as the need for water develops. Likewise any drainage facilities (expected to be of minor significance in this area due to the favorable natural drainage that exists) would be constructed by the district. No electric generating facilities are contemplated as a part of the Ventura River project; studies showed such facilities to be economically unjustified, principally because of the small and erratic streamflow and operational requirements to meet other water use demands.

As schematically illustrated on plate 4, under the proposed method of project operation water would be diverted from the Ventura River at Robles division dam and would flow through the Robles-Casitas Canal to Casitas Reservoir for storage and subsequent use. Inflow from Coyote and Santa Ana Creeks also would be stored in the reservoir. Due to the periods of low streamflow, Casitas Reservoir would require operation on a long-term carryover basis. Assuming a repetition of historical conditions of runoff, the period 1918–44 was found to be the most critical from a water supply standpoint. As shown by the heavy dashed lines in the lower righthand corner of plate 3, during this critical period the project as proposed would meet an annual demand of 27,800 acre-feet, and after allowance for an average annual evaporation of 3,400 acre-feet, an average of some 6,300 acre-feet annually would spill to the ocean. In these computations an allowance has been made for an average annual prior use of water of 3,000 acre-feet. Plate 5 illustrates the buildup and depletion of the long-term carryover storage in the reservoir, assuming a repetition of the historical runoff for the period 1918–52. It should be noted that the period prior to 1918 was a wet one, so that the reservoir would have been full in that year. Sufficient runoff available for storage should occur following construction of the reservoir to permit the safe yield obtainable during the period of reservoir filling to meet the increase in demands for project water. This determination, made on the basis of a study of the past 87 years of precipitation or runoff records,

would be correct in all cases with the single exception of the possible, but unlikely, occurrence of a drastic drought period similar to 1948–52 shortly after initiation of reservoir operation. Inasmuch as southern California is now experiencing a dry period, which has extended over an 11-year period, and since the average length of dry periods appears to be approximately 14 years, it is probable that a series of wet years would be in the offing by the time the storage facilities were constructed, assuming an early start of construction. It is because of this necessity for long-term carryover storage of water from the flood years, combined with the critical need for additional water supply, that the Ventura River Municipal Water District has felt that the investment of $720,000 in advance preparation of designs and specifications for the project was justified, in order to take the maximum advantage of the impending wet period.

From the reservoir, water would be conveyed through the main conduit system, including pressure pipelines, pumping plants, and balancing reservoirs, to various points of delivery throughout the project area. The main conduit system would interconnect with the existing pipeline from existing Matilija Reservoir in order to properly integrate the operation and effectiveness of the two systems.

Casitas Reservoir, operated in conjunction with the other recommended features and integrated with the existing Matilija Reservoir, would provide a safe annual yield of 28,000 acre-feet. The project yield of 28,000 acre-feet would meet the estimated requirements except for the Rincon addition for water during the 50 years after initiation of project operation. The chemical quality of the water from the proposed Casitas Reservoir would be superior to that now obtained for both irrigation and municipal use because of the diluting effect of the larger portion of the streamflows which would be stored. In the future, possibly 50 years or more, when the requirements approach the yield or sedimentation prevented effective operation of the existing Matilija Reservoir, a reservoir of about 10,000 acre-feet should be constructed on the Ventura River at the Nordhoff site, a short distance upstream from Robles diversion dam site. This would permit the safe yield at that time to be increased to about 30,000 acre-feet.

RECREATION, FISH AND WILDLIFE, AND OTHER CONSIDERATIONS

The Ventura River project would provide the opportunity for obtaining important incidental uses in addition to serving the area's water supply needs. The reservoir and its shorelands would offer opportunity for recreation and development of a sports fishery. In addition a small incidental flood-control benefit might result. Watershed conservation and protecting the quality of the water supply would be corollary to these incidental benefits.

A study made by the National Park Service of the Department of the Interior shows that Casitas Reservoir would be used extensively for recreation. Although most of the patronage, estimated at 376,000 annual visitor-days on the basis of 1953 populations, would come from a 50-mile radius, a considerable visitation also would come from the Los Angeles area. Basic recreational facilities totaling approximately $500,000 will be needed over a period of years according to the National Park Service. Of this amount, $169,000 is for minimum basic recreational facilities and could be nonreimbursable. The Service recommended, however, that additional, more detailed studies be made and that a Ventura County Park Agency be established to develop and operate the recreational facilities. It is estimated that, as a minimum, annual benefits of $47,000 attributable to project construction would result from use of Casitas Reservoir for recreation.

According to the findings of an investigation made by the Department of the Interior, Fish and Wildlife Service, a valuable fishery may be anticipated in Casitas Reservoir. A minimum annual angling use of 10,000 fisherman-days may be expected according to the Service. Construction of recreational facilities and improving access to the reservoir would increase the use. On the basis of the minimum use alone an annual benefit value of $100,000 is estimated. The Fish and Wildlife Service recommended that Federal lands and leases of Federal lands provide that the area be open to hunting and fishing whenever practicable considering public safety, efficient operation, and protection of public property. It also recommended that more detailed studies of fish and wildlife resources affected be conducted as necessary following project authorization.

The Department of the Army, Corps of Engineers, recognized, in its flood-control-survey report prepared in 1940, that potential damages from floods existed along portions of Ventura River and Coyote Creek in addition to those which the construction of recommended levees, now completed, would prevent. Flood control works to avoid these potential damages were not considered

economically justified. Although the proposed Ventura River project would be operated for conservation purposes, it should have some incidental flood-control benefits of a minor nature but an evaluation of them has not been made in this analysis.

Nearly 85 percent of the total watershed area of the Ventura River project above the proposed Robles diversion dam and Casitas Reservoir is within the Los Padres National Forest. The type of terrain and the inflammable cover during the dryer months of each year make an effective watershed management program essential. An investigation made by the Department of Agriculture in 1953 recommended an integrated watershed conservation program including increased fire protection, control of active sediment source areas, and stream channel improvement. That program would benefit the proposed project primarily by reducing sedimentation damage which otherwise would occur both to Casitas and Matilija Reservoirs.

Public health and sanitation aspects of the proposed project have been investigated by the Public Health Service of the Department of Health, Education, and Welfare in collaboration with State and local health and pollution control agencies. The Public Health Service made several recommendations that would insure that the project water supply will be of satisfactory quality for domestic use and suggested that construction be so conducted as to eliminate mosquito breeding areas. These recommendations and suggestions will be helpful in developing a safe, dependable water supply.

CAPITAL AND ANNUAL COSTS

The estimated capital cost of the Ventura River project, on the basis of January 1954 prices, is $27,500,000 plus $169,000 for minimum recreational facilities. Probable savings in construction costs already indicated in the preconstruction designs being financed by the Ventura River Municipal Water District will offset minor increase of estimated cost of the line to serve the coastal strip as a result of the Rincon area annexation. For this reason the present estimated cost of the project remains at $27,500,000, as covered in the report of the Secretary of the Interior. This estimate was made from preliminary designs of the proposed features and includes costs for construction, contingencies, investigations, engineering, general expense, land and rights, relocation of existing property, clearing, and construction faciilties. Annual operation, maintenance, and replacement costs of project features, including costs for water treatment and electric energy for water conveyance, are estimated to average about $262,400 over the 50-year period of analysis following construction. A summary of the estimated capital and average annual costs is shown in the following tabulation:

Project feature	Capital cost [1]	Average annual operation, maintenance, and replacement costs
Casitas Dam and Reservoir	$17,624,000	$36,900
Robles diversion dam	362,000	1,500
Robles-Casitas Canal	1,585,000	16,200
Main conduit system	7,804,000	[2] 207,800
General property	125,000	
Total	27,500,000	[3] 262,400

[1] Estimated capital costs based on January 1954 prices.
[2] Includes estimated average annual costs for electric energy and water treatment expenses.
[3] Estimated costs based on current prices. Replacement costs included in this estimate are computed on an interest-free basis for repayment purposes; the sinking-fund method was employed to determine replacement costs for benefit-cost analysis.

ECONOMIC JUSTIFICATION

A comparison of annual equivalent benefits and costs is depicted graphically on plate 6. The economic justification of the Ventura River project has been determined by benefit-cost analyses comparing annual equivalent benefits with annual equivalent costs. The benefits for water service from the project were measured at the point of delivery from the main conduit system. Therefore, only the costs of the proposed project features necessary to convey water to the delivery point were included in the benefit-cost analyses. Distribution system

costs beyond the delivery point where deducted from the benefits before computing the benefit-cost ratios. The estimated recreation and fishery benefits associated with the project were included in the benefit-cost evaluation.

Annual equivalent Federal costs for the Ventura River project consist of the amount necessary to amortize the net project investment over a 50-year period at 2.5 percent interest plus the annual operation, maintenance, and replacement expenses. Proper adjustment was made in the annual costs for the estimated construction period and for the long-term price outlook over the 50-year period. The resulting annual equivalent costs are as follows:

Amortization of net project investment	$850,000
Operation, maintenance, and replacement	[1] 178,000
Total	1,028,000

[1] Replacement costs included in this estimate were computed on a sinking-fund basis with interest at 2.5 percent.

Annual equivalent benefits were computed on the basis of water uses expected to develop during the 50-year period following initiation of operation of the project. The portion of the benefits creditable to prospective irrigation use was adjusted for the long-term projection of agricultural prices. The estimated annual equivalent benefits, both primary and total, are summarized as follows:

	Annual equivalent benefits	
	Primary	Total
Irrigation	$978,000	$2,541,000
Municipal and industrial	684,000	1,776,000
Other secondary uses [1]	147,000	147,000
Total	[2] 1,809,000	[2] 4,464,000

[1] Includes recreation and fishery benefits; primary and total benefits are considered to be identical.
[2] Excludes any benefits due to yield of the existing Matilija Reservoir operated under nonproject conditions and at a non-Federal cost.

The total annual equivalent benefits of $4,464,000 exceed the annual equivalent Federal costs of $1,028,000 by a ratio of 4.25 to 1. A similar comparison using only the primary annual equivalent benefits of $1,809,000 results in a favorable benefit-cost ratio of 1.76 to 1. These benefit-cost ratios indicate clearly the economic justification and desirability from the national standpoint of constructing the Ventura River project.

COST ALLOCATION AND REPAYMENT

The cost allocation and repayment are depicted graphically on plate 7. The financial feasibility, or probable repayment, of the Ventura River project has been determined by allocating the project costs between the two functional water uses and then analyzing the repayment potentials. No project costs were allocated to secondary functions, recreation, and fish and wildlife, although benefits from those sources are indicated. The capital cost allocation employed the separable costs-remaining benefits method.

In the report of the Secretary of the Interior on this project, a possible method of repayment was presented based essentially on 40 equal installments respectively for irrigation and for the municipal and industrial allocations. However, as stated in that report, further consideration of repayment arrangements was contemplated, pursuant to existing reclamation law. Although formal repayment negotiations have not yet been entered into, the Ventura River Municipal Water District and the Bureau of Reclamation have discussed the repayment aspects. A resolution was recently adopted by the board of directors of that district indicating a preference for a graduated repayment schedule which would roughly parallel the estimated buildup of the demand for the project water over a 50-year payment period. The amounts shown graphically on plate 7 are based on this type of repayment. It would increase the total interest payments on the municipal and industrial water-supply allocation and at the same time alter slightly the schedule of payments on the irrigation costs. It would not change the period of payout.

In order to recover the capital cost with interest plus operation and maintenance costs, it is estimated that the total district cost for water for municipal and industrial purposes would be $95 per acre-foot. Although this cost of water is high as compared with that in other communities more favorably located, it is within the repayment ability of the municipal and industrial water users. In a like manner, the estimated cost of irrigation water delivered at the farm without interest on the project investment would be $48 per acre-foot. This rate is sufficiently within the estimated repayment capacity of $60 per acre-foot for lands without a present supply to produce an incentive for development. However, in common with the usual practice, rates to the water users would be reduced through ad valorem taxes in order to encourage more rapid development.

PUBLIC APPROVAL

Local interest in a new dependable water-supply development in the Ventura River area has been evidenced for many years by repeated requests for investigations. On October 17, 1952, the Ventura River Municipal Water District was formed for the purpose of investigating and solving the water-supply problems existing within its boundaries. The investigation and plan of development was made on an cooperative basis under a contract with the district bearing one-half the cost. By resolution dated March 24, 1954, the board of directors of the district requested the Bureau of Reclamation to expedite this report for the purpose of obtaining the earliest possible authorization of the project by Congress, and also requested Reclamation to submit a form of agreement for advanced planning and preconstruction work by Reclamation at district expense. On July 29, 1954, a contract was executed providing the financial arrangements for this work which is now proceeding.

In addition to local interest and cooperation expressed through the Ventura River Municipal Water District, the Board of Supervisors of Ventura County, acting in its capacity as the board of directors of the Ventura County Flood Control District, has expedited the proposed project with a formal agreement on May 26, 1954, providing for the operation and maintenance of Matilija Reservoir and all appurtenant facilities by the Ventura River Municipal Water District upon completion of the proposed project. At the same time the flood-control district assigned to the Ventura River Municipal Water District its several applications for unappropriated water in the Ventura River Basin, for which permits have not been issued. The executed agreement relating to operation of Matilija Reservoir assures that integrated operation of the two reservoirs, as proposed, can be effected upon completion of Casitas Reservoir. The action in regard to assignment of the applications for appropriation of water likewise is important as it cleared the way for the Ventura River Municipal Water District to file its recent applications, with the State engineer of California, specifically covering the water needed for the proposed Ventura River project. A further expression of local interest was made by a resolution adopted on October 26, 1954, by the Board of Supervisors of Ventura County in which the supervisors endorsed the construction of the Ventura River project and commended the board of directors of the Ventura River Municipal Water District on its efforts to effect early construction of these greatly needed water-development facilities.

CONCLUSIONS

The investigations covered in the report of the Secretary of the Interior support the following conclusions:

(*a*) A critical need for an additional water supply within the project area exists now and this need will become increasingly acute;

(*b*) The requirement for irrigation water would reach nearly three-fourths of the total requirement by the 20th year of project operation; municipal and industrial water use would comprise the remainder, but this proportion would shift and by the end of the 50-year period following construction the municipal and industrial needs probably would exceed slightly those of irrigation;

(*c*) The water-supply works proposed in this report are feasible from an engineering standpoint and constitute the most practicable and least costly means of meeting the needs of the area for possibly 50 years after construction of the project;

(*d*) Project operation would be beneficial to other uses, notably development of a sports fishery and recreational opportunities;

(*e*) The project is economically justified as measurable benefits exceed costs by a ratio of 4.25 to 1; considering primary benefits only, the ratio would be 1.76 to 1;

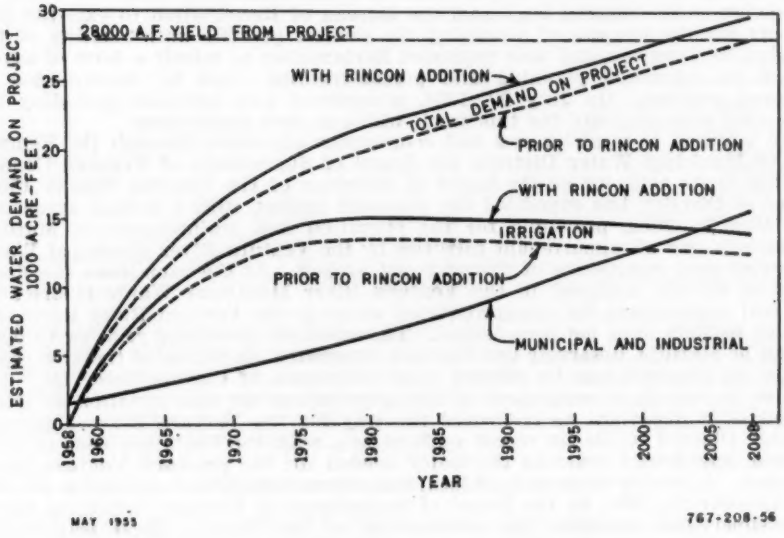
(*f*) All Federal costs are reimbursable except those for minimum recreational facilities and as allocated between irrigation, and municipal and industrial uses can be repaid in accordance with the provisions of Federal reclamation laws;

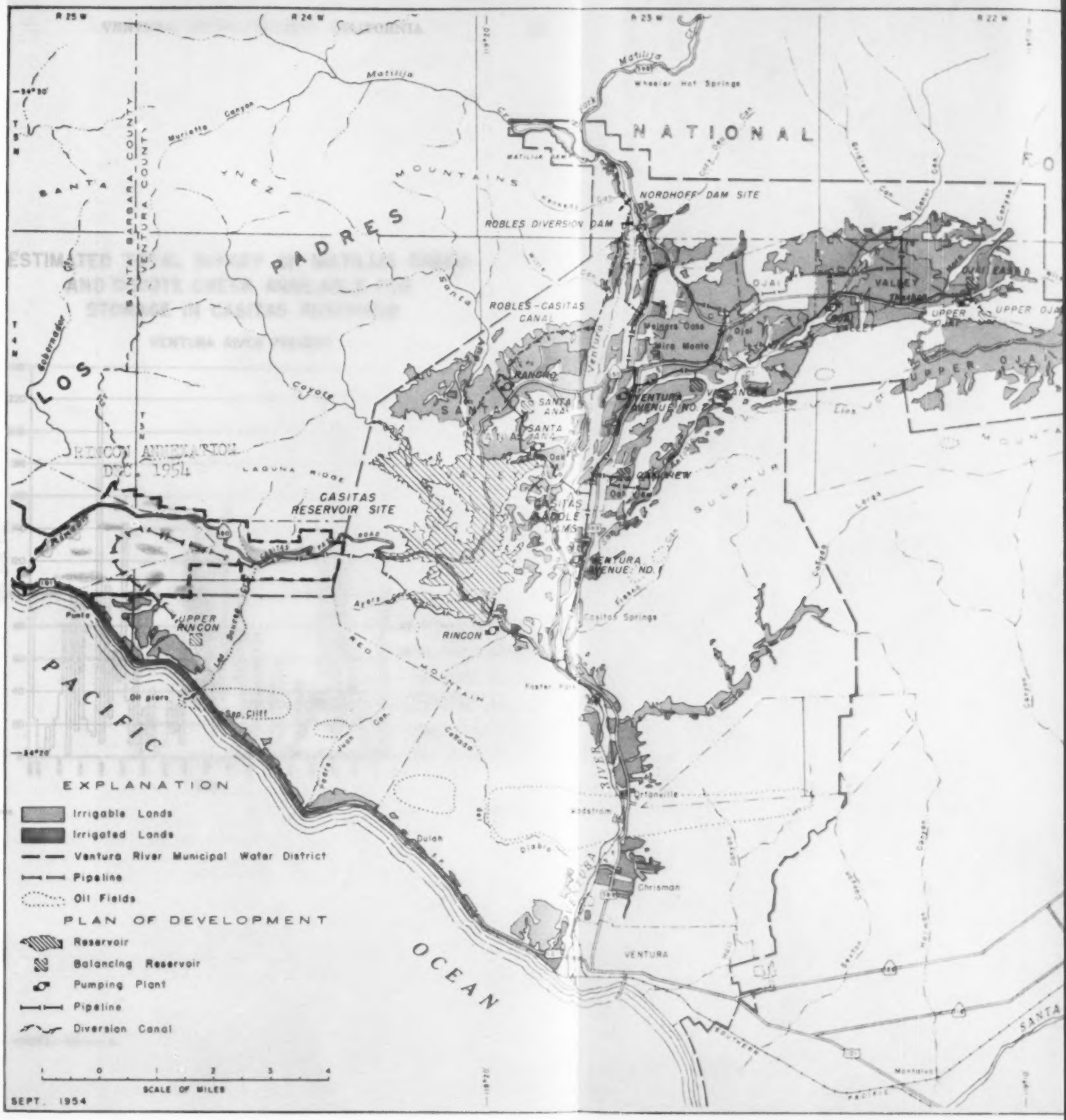
(*g*) The local interests, represented by the Ventura River Municipal Water District and the Board of Supervisors of Ventura County, have approved the proposed project and desire early construction as a Federal reclamation development; and

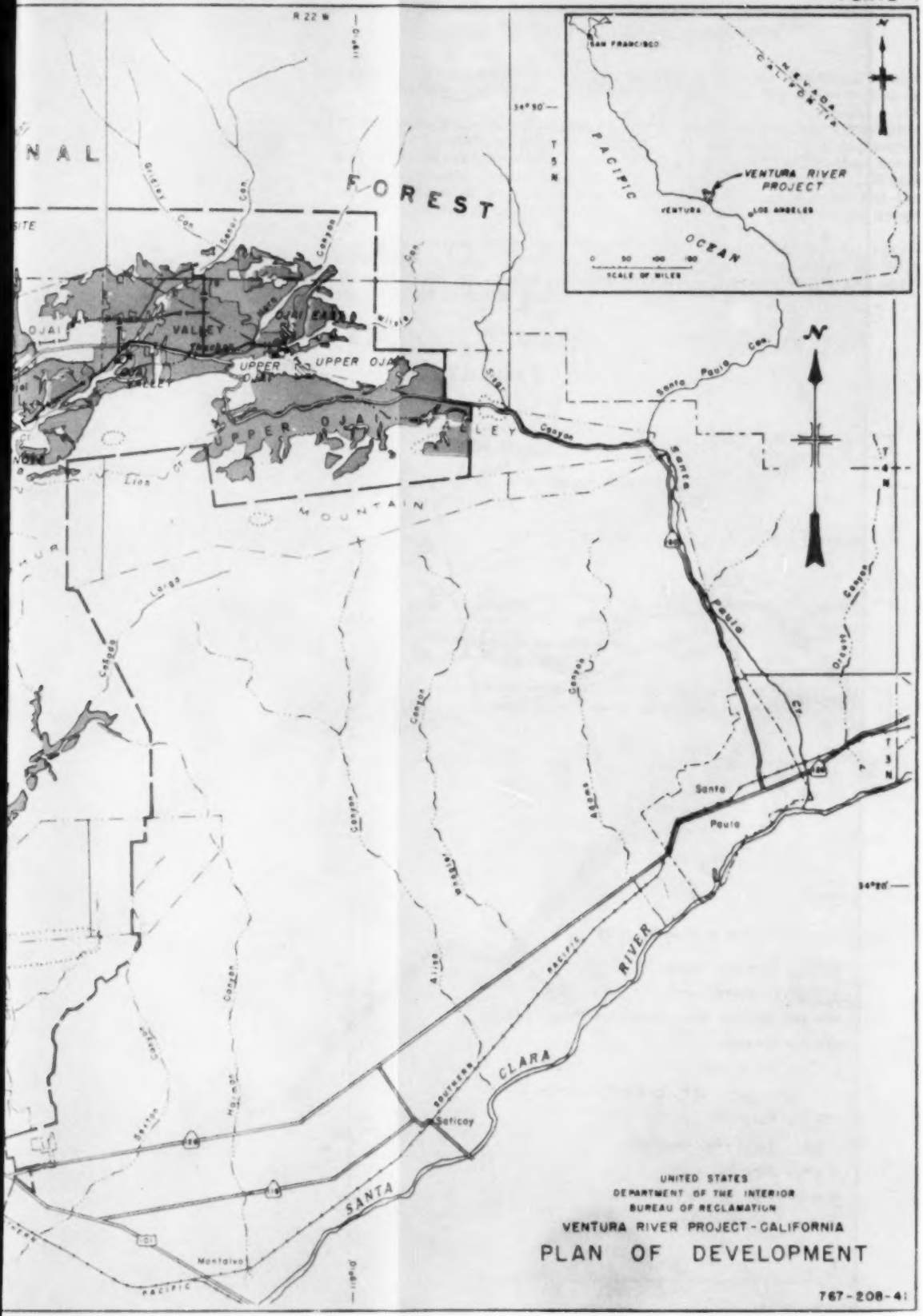
(*h*) The Ventura River Municipal Water District has completed an agreement with Ventura County relating to the operation of the existing Matilija Reservoir upon completion of the project; this important action assures operational integration of Matalija Reservoir with the proposed project.

ESTIMATED WATER DEMAND BUILDUP

VENTURA RIVER PROJECT

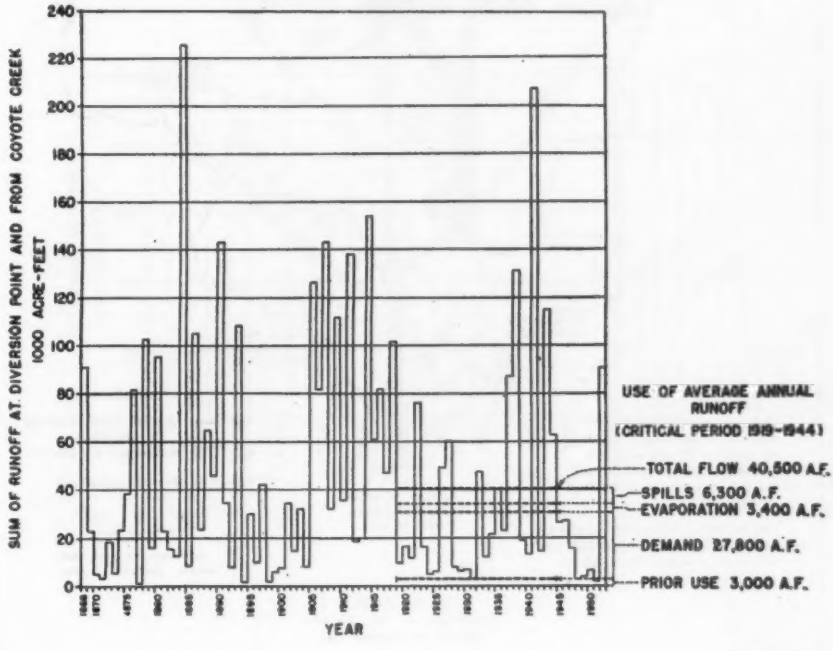



R 25 W
R 24 W
R 23 W
R 22 W
Matilija
Wheeler Hot Springs
NATIONAL
NORDHOFF DAM SITE
ROBLES DIVERSION DAM
SANTA BARBARA COUNTY
VENTURA COUNTY
SANTA YNEZ MOUNTAINS
PADRES
LOS
ROBLES-CASITAS CANAL
OJAI VALLEY
UPPER OJAI
Weldon Cons
Mira Monte
RANCHO SANTA ANA
VENTURA AVENUE NO. 2
VENTURA AVENUE NO. 1
OAKVIEW
CASITAS SADDLE
CASITAS RESERVOIR SITE
LAGUNA RIDGE
RINCON ANNEXATION DEC. 1954
UPPER RINCON
RINCON
Casitas Springs
RED MOUNTAIN
Oil piers
Sea Cliff
PACIFIC
OCEAN
Oriolville
Dulah
Chrisman
VENTURA
SANTA
EXPLANATION
Irrigable Lands
Irrigated Lands
Ventura River Municipal Water District
Pipeline
Oil Fields
PLAN OF DEVELOPMENT
Reservoir
Balancing Reservoir
Pumping Plant
Pipeline
Diversion Canal
0 1 2 3 4
SCALE OF MILES
SEPT. 1954

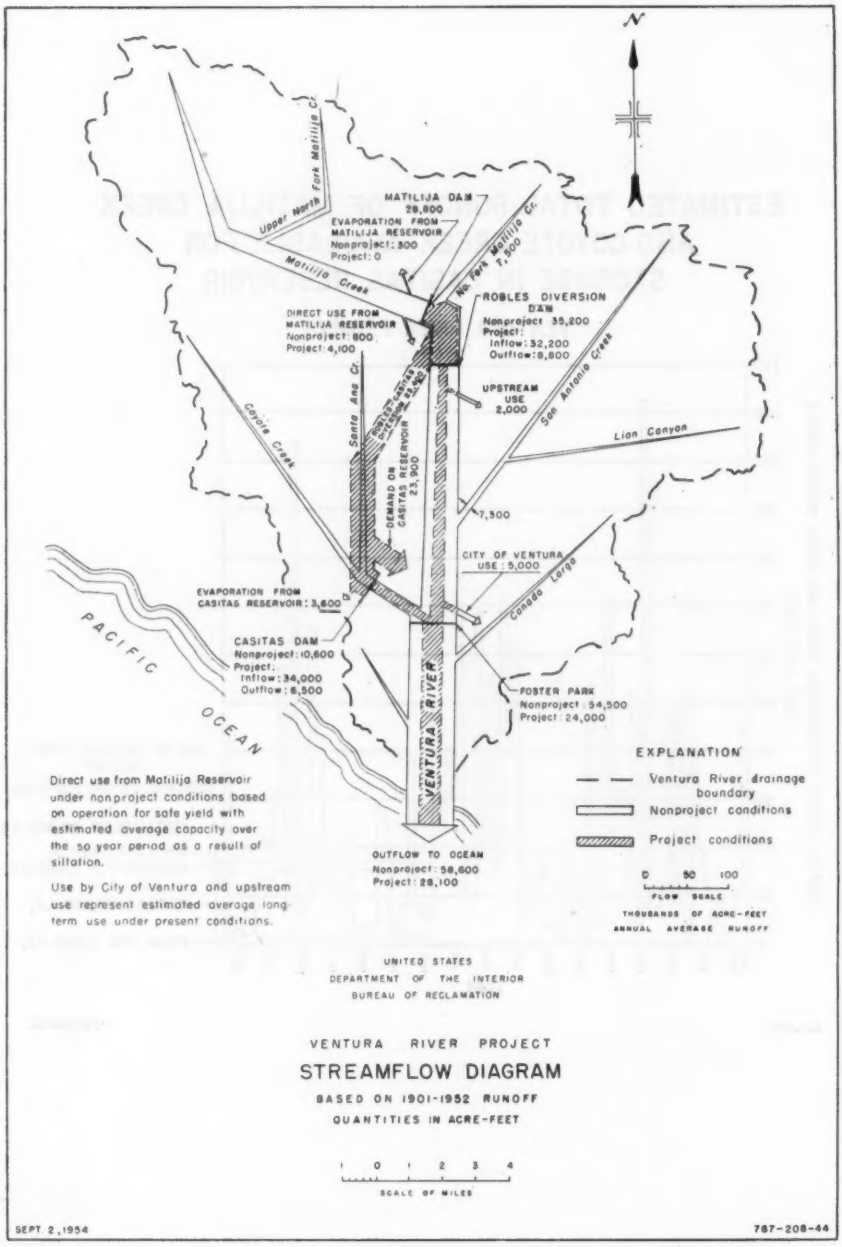

R 22 W
T 5 N
T 4 N
T 3 N
NAL
FOREST
VALLEY
UPPER OJAI
MOUNTAIN
Santa Paula
Saticoy
SANTA CLARA RIVER
Montalvo
PACIFIC
OCEAN
SAN FRANCISCO
NEVADA
CALIFORNIA
VENTURA RIVER PROJECT
VENTURA
LOS ANGELES
SCALE OF MILES
UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF RECLAMATION
VENTURA RIVER PROJECT - CALIFORNIA
PLAN OF DEVELOPMENT
767-208-41

ESTIMATED TOTAL RUNOFF OF MATILIJA CREEK AND COYOTE CREEK AVAILABLE FOR STORAGE IN CASITAS RESERVOIR

VENTURA RIVER PROJECT

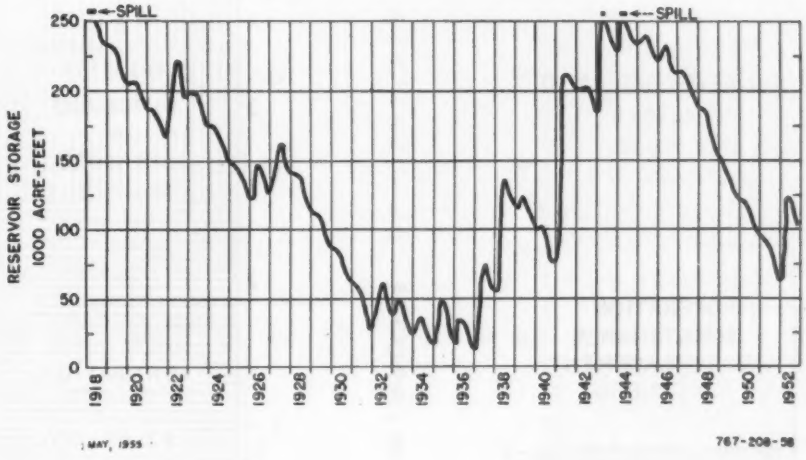


MAY, 1955 757-208-52


N
Upper North Fork Matilija Cr.
MATILIJA DAM
29,800
EVAPORATION FROM MATILIJA RESERVOIR
Nonproject: 300
Project: 0
North Fork Matilija Cr.
7,900
Matilija Creek
ROBLES DIVERSION DAM
Nonproject 35,200
Project:
Inflow: 32,200
Outflow: 9,800
DIRECT USE FROM MATILIJA RESERVOIR
Nonproject: 800
Project: 4,100
Santa Ana Cr.
POSTER-LYONS DIVERSION 28,300
UPSTREAM USE 2,000
San Antonia Creek
Coyote Creek
Lion Canyon
DEMAND ON CASITAS RESERVOIR 23,900
7,300
CITY OF VENTURA USE: 5,000
Canada Larga
EVAPORATION FROM CASITAS RESERVOIR: 3,600
PACIFIC OCEAN
CASITAS DAM
Nonproject: 10,600
Project:
Inflow: 34,000
Outflow: 6,500
VENTURA RIVER
POSTER PARK
Nonproject: 54,500
Project: 24,000
OUTFLOW TO OCEAN
Nonproject: 58,600
Project: 28,100
Direct use from Matilija Reservoir under nonproject conditions based on operation for safe yield with estimated average capacity over the 50 year period as a result of siltation.
Use by City of Ventura and upstream use represent estimated average long-term use under present conditions.
EXPLANATION
Ventura River drainage boundary
Nonproject conditions
Project conditions
0 50 100
FLOW SCALE
THOUSANDS OF ACRE-FEET
ANNUAL AVERAGE RUNOFF
UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF RECLAMATION
VENTURA RIVER PROJECT
STREAMFLOW DIAGRAM
BASED ON 1901-1952 RUNOFF
QUANTITIES IN ACRE-FEET
1 0 1 2 3 4
SCALE OF MILES
SEPT. 2, 1954
787-208-44

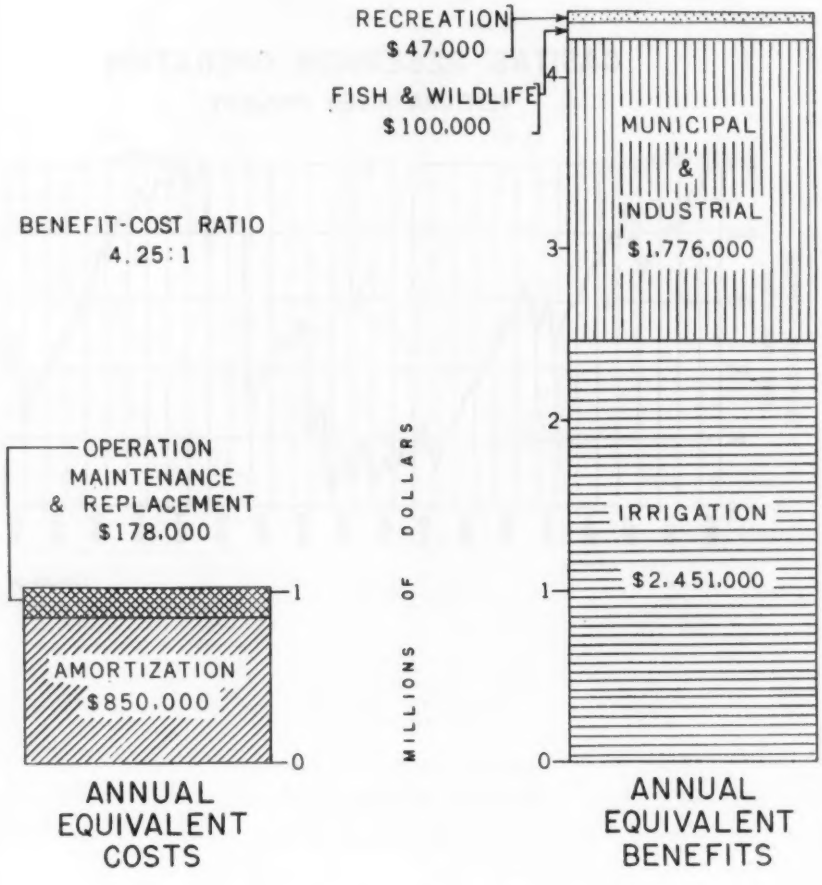
CASITAS RESERVOIR OPERATION

VENTURA RIVER PROJECT



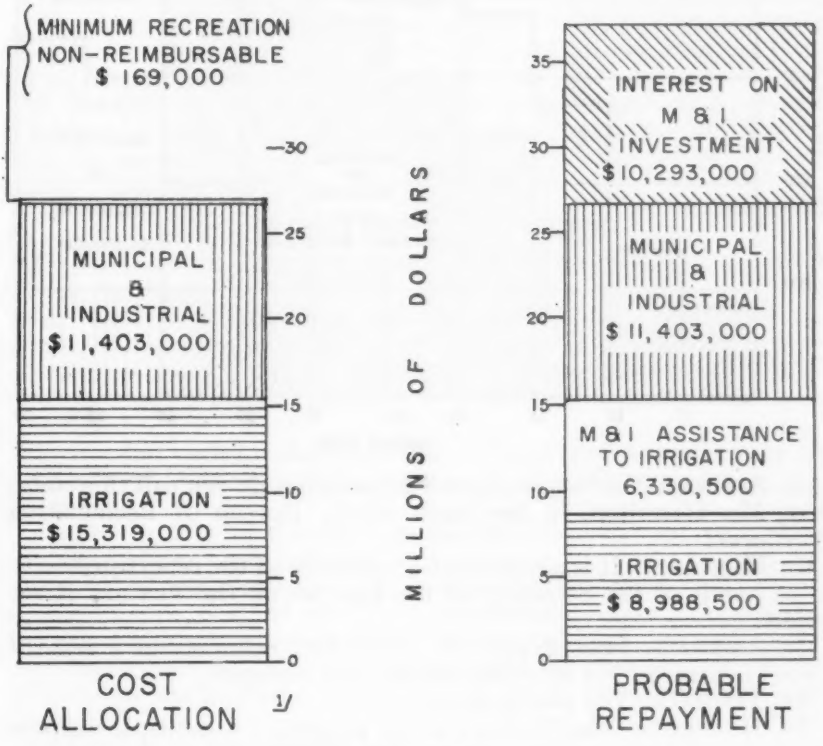
COMPARISON OF ANNUAL EQUIVALENT BENEFITS AND COSTS

VENTURA RIVER PROJECT



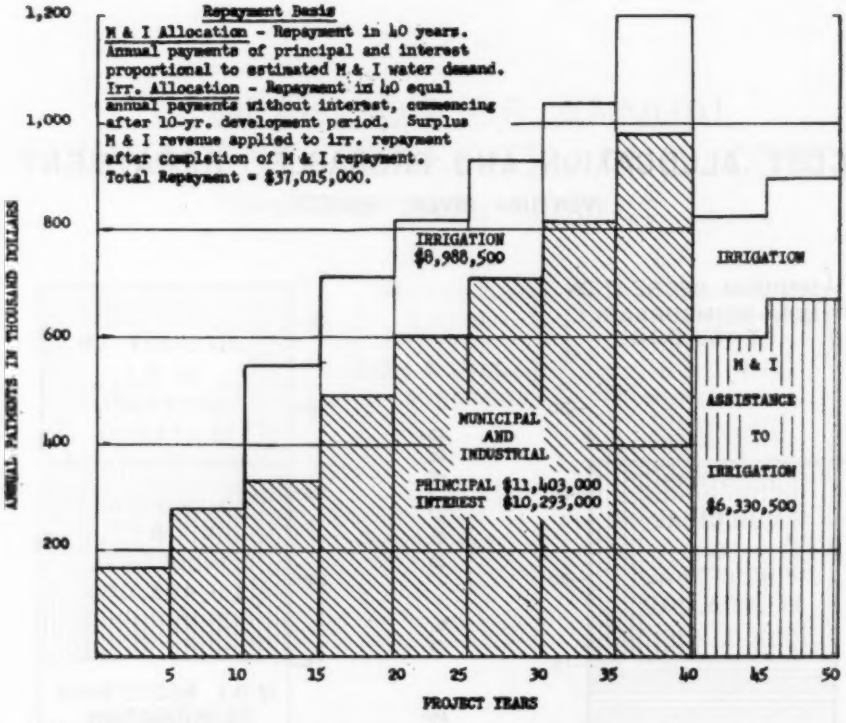
COST ALLOCATION AND PROBABLE REPAYMENT

VENTURA RIVER PROJECT



1/ THE $26,722,000 ALLOCATED FEDERAL COST EXCLUDES $778,000 ADVANCED BY LOCAL INTERESTS.

ANNUAL PROJECT PAYMENTS



Mr. ASPINALL. Before you proceed, just what do you call this statement, Mr. Hamilton, in the terms of the Bureau of Reclamation procedures?

Mr. HAMILTON. It is a statement on contents of the report presently in the hands of the Secretary of the Interior on the Ventura River project.

Mr. ASPINALL. Does it have any particular reference as a report?

Mr. HAMILTON. No, sir; they are my own remarks.

Mr. ASPINALL. You may proceed.

Mr. HAMILTON. The Ventura River project is a multiple-purpose one designed primarily for the service of irrigation and municipal and industrial water. It is located 60 miles northwest of the city of Los Angeles.

There is both a present and future need for water to irrigate and to furnish municipal water supplies for approximately 26,000 acres.

The estimated cost of this project is $27,500,000, of which the district has already contributed $778,000 of money necessary to prepare plans and specifications for this project—a rather unusual procedure.

The works include a large reservoir, a diversion canal, and conveyance works to carry the water from the reservoir to the lands.

Direct benefit-cost ratio exceeds costs by a ratio of 1.76 to 1. The total benefit-cost ratio is 4.25 to 1.

All costs are reimbursable except a possible recommendation for a nonreimbursable allocation of $169,000 for minimum recreation facilities.

From the standpoint of the water used over the payment period for the project, approximately 60 percent of the water will be used for irrigation and 40 percent for municipal and industrial purposes.

The municipal and industrial allocation will be repaid in 40 years with interest. The interest would be returned to the Federal Treasury and not credited to the irrigation allocation.

The operation and maintenance of this project as presently proposed and accepted by the district would be by the district at the cost of the district and not at the cost of the Federal Government.

I think if you refer to chart 1 I can describe briefly the area involved.

(The chart referred to is the map designated "U. S. Department of the Interior, Bureau of Reclamation, Ventura River Project, California, Plan of Development, No. 767–208–41.")

Mr. HAMILTON. The Ventura River Basin is a relatively small one, rising in high mountains of some 6,000 feet in elevation and flowing out to the ocean. The city of Ventura, as I mentioned before, is about 60 miles from the city of Los Angeles.

The district area does not encompass the entire basin but somewhat of a smaller area generally surrounding the irrigable lands.

Mr. SAYLOR. Mr. Hamilton, can you designate what is the river basin on that map?

Mr. HAMILTON. The river basin is roughly this: Following my pointer, it covers essentially the area shown by the stream system indicated in blue. I might say that this chart I am showing here is the same chart which appears in my prepared statement as chart No. 1.

The rainfall varies widely over this basin, averages about 15 inches at the city of Ventura, up to a maximum of about 32 inches in the mountains.

There are within the district three major oilfields occupying an area to the west of the Ventura River.

The city of Ventura has a population of approximately 25,000 at the present time, and the other small communities have an aggregate population of approximately 10,000, for a total of 35,000 persons.

The water used at the present time aggregates approximately 9,200 acre-feet for agricultural purposes and 7,000 for municipal and industrial.

In addition to the oilfields are the servicing industries for both agriculture and the oil industry.

The present developed water resources consist of a small storage reservoir in the upper portion of the Ventura River Valley, a ground-water reservoir which has been developed in this arm of the Ventura River Valley known as the Ojai, certain amounts of water developed from the Ventura River, and finally an emergency water supply which is being pumped from wells located on the beach drawing water from under the ocean, subject to salt-water intrusion.

From an area standpoint, agriculture now consists of approximately 4,400 acres of irrigated lands. Urban development occupies an area of approximately 5,000 acres.

This development is urgently needed because there are no remaining water supplies which can be developed from ground water or from

simple surface diversions. Both the irrigated areas and the city of Ventura are experiencing water shortages. Likewise, the city of Ojai is experiencing water shortages. All the fringe land around the Ojai Valley periodically experience a recession of the ground water table, so that they are no longer able to get water for their lands.

In the future there will be a total need for water to irrigate some 13,000 acres, in addition, 8,000 acres of urban lands, for a total of 21,000 acres.

In addition to that, the city of Ventura is expanding to the east and is looking to the Ventura River for its water supply, an additional 5,000 acres in the area to the east of the city.

It is estimated that the future population of the entire district, including this area to the east of the city of Ventura, will be around 100,000.

The project water requirement to supplement the present water supplies of approximately 13,000 acre-feet will be 28,000 acre-feet. As I mentioned before, 60 percent of this demand will be for agriculture and 40 percent for urban purposes.

Over here we have chart No. 2 of the prepared statement enlarged for convenience.

At the time that the report was prepared the estimated water demands were as shown by these dashed lines. However, since the time that we completed our report and were in the process the district annexed some additional lands in the extreme western portion of the district, commonly referred to as the Rincon annexation. It is very valuable lemon land if it had a water supply. So the present estimated demand is considerably higher as shown by the solid line. It has been increased by some 1,400 acre-feet. However, the statements which I will make before your committee this morning are based on the estimate prepared prior to this annexation. The effect, of course, would be to increase the percentage of use for irrigation since there would be practically no municipal type used in this annexed area.

It will be noted that it is anticipated that the agricultural demands will increase rapidly over the first 20 years after the project goes into operation and then level off, with a very slight encroachment of the irrigated lands by municipal development. On the other hand, the demand for municipal and industrial water will continue to increase, according to our estimates, through the 50-year payout period of the project.

The character of the runoffs in the Ventura River is similar to the other areas in southern California: It is either feast or famine. There will be a long series of years there will be no runoff in the stream, to be followed by another series of years of intensive runoff, and that affects very drastically the design of any project to conserve the water in the southern California area.

This problem is further complicated in the case of this project by the fact that there was only one good reservoir site—Casitas Reservoir. All the rest of the stream sections are so precipitous there is practically no storage space available.

The Casitas Reservoir which we are proposing is located on a tributary of the Ventura River called Coyote Creek. That water would have to be diverted from the main river into the reservoir. So that in the planning it became important that the site not be underde-

signed, that is the reservoir site not be underdesigned because it is the only hope for future water development for this area.

We thought to adequately meet the needs of this area over the period of the next 50 years a reservoir of 250,000-acre-foot capacity would be needed.

The works involved are quite simple. There is a diversion dam on the main river at the point where it comes from the mountains; a 6-mile diversion canal known as the Robles-Casitas diversion canal into the Casitas Reservoir; and then a conveyance system to take the water from the reservoir to the service area, involving some 33 miles of pipelines and 6 pumping plants, 6 regulating reservoirs.

Mr. ASPINALL. You have 1 minute left of your 20 minutes. Will you be able to finish in that 1 minute?

Mr. HAMILTON. Yes, sir.

I think then, Mr. Chairman, I had better go immediately to the cost considerations.

This project will have, as I mentioned before, a benefit-cost ratio of 4.25 to 1 and a direct benefit-cost ratio of 1.76 to 1.

The repayment capacity for this project is figured in terms of how much the farmers can afford to pay for water. We estimate they can afford to pay $60 an acre-foot. The cost of the water is approximately the same, $60 an acre-foot, delivered at the farm. In order to accomplish this and make the project attractive and furnish adequate incentive, the local people in the district through their board of directors have indicated that part of the capital costs will be recovered through a general tax on the area, bringing the delivery costs of the water down to approximately $35 an acre-foot.

In addition, the municipal and industrial payments for water, after the municipal and industrial allocations are paid off, would be applied to the irrigation allocation, thus making the project feasible from the irrigation standpoint.

There is this to be said about the project: At the present time the need for water is so pressing in the area for municipal purposes that unless Federal financing is made possible irrigation development will not be sufficiently attractive so that irrigation can go forward. Therefore, the reservoir site would be preempted for municipal uses and the future chances of developing irrigation in the area would be precluded.

Mr. ASPINALL. Thank you very much, Mr. Hamilton.

Under the previous agreement entered into, each Member here will have approximately 3 minutes. However, some may not wish to ask questions, and if you see someone in distress who wants more time, please yield your time to that party.

The Chair recognizes the gentleman from Florida, Mr. Haley.

Mr. HALEY. Mr. Chairman, I reserve my time at this time.

Mr. ASPINALL. The Chair recognizes the gentleman from Pennsylvania, Mr. Saylor.

Mr. SAYLOR. Mr. Hamilton, you stated that the community had already contributed over $700,000 toward the planning of this project. That is so unusual I would like to have you tell this committee how that was arranged.

Mr. HAMILTON. That was arranged due to the fact at the present time there is a large oilfield under peak development in the area,

raising the assessed valuation at the moment to $200 million. That field is being depleted, and we estimate that over the repayment period this depletion will be completed. So that, if I follow your question, Congressman, that $200 million assessed valuation will not be available in the area over the entire repayment period, actually only a short period of that time.

Mr. SAYLOR. My question was as to how anybody contributed $700,000 to the planning of this project. In other words, does this set a precedent that a community that can afford to come in and contribute money can have their propositions planned or their projects planned and other districts cannot?

Mr. DEXHEIMER. Mr. Saylor, if I might answer that. As you know, the Congress has repeatedly admonished us to collect 50 percent of investigation funds from those people who wanted an investigation, and this project originally came under that provision where the local people contributed 50 percent of the investigation funds. As a result that preliminary report looked so good, and the people were so urgently in need of additional water that they came to us and voluntarily said, "We will be glad to furnish funds. Knowing that it will take too long for you to get advanced planning and get the project approved, we will provide additional funds for your advanced planning."

We entered into an agreement with them which provides that we would make that report at their expense. The report, of course, would be their property, available to them, and we made no commitment as to whether or not the Federal Government would enter into a contract to build the project or whether the Congress might later approve it. This is the first step of their trying to get approval as a Federal project for this.

Mr. ASPINALL. The time of the gentleman from Pennsylvania has expired. Does anybody wish to yield?

Mr. HALEY. I will be glad to yield the gentleman my time.

Mr. ASPINALL. The gentleman is recognized for 3 minutes.

Mr. SAYLOR. Now, you have advised us, Mr. Hamilton, that the actual cost of the water for irrigation is $60 per acre-foot and that the farmers will pay $35 an acre-foot, leaving $25 to be covered by taxes; is that correct?

Mr. HAMILTON. That is correct.

Mr. SAYLOR. What is the amount that would be expended for municipal or industrial water?

Mr. HAMILTON. The amount expended for municipal and industrial water will be $95 an acre-foot.

Mr. SAYLOR. And that is for the untreated water delivered to the municipal treatment plant?

Mr. HAMILTON. That is correct.

Mr. SAYLOR. The tax of $25, which is a substantial amount, which is going to be paid—I am interested in where they are going to get the tax revenues because the farmers are going to have to pay some portion of that; is that not correct?

Mr. HAMILTON. That is right. Congressman, I should like to make a correction there. As contemplated, the amount contributed by taxes would be $12. The balance of $13 average per acre-foot would be contributed through the payments in the 40th to 50th year of the payout period by contributions from the municipal water sale.

Mr. SAYLOR. Then, the next question that I have: This formula which you have set forth on page 2 of your statement, the last 5 lines:

> Those portions of project costs allocated to municipal and industrial water service would be repaid with interest on the invested capital. This interest would be returned to the Federal Treasury and would not be credited to the repayment of the irrigation allocation.

That is a new formula. I have never heard anybody come forward with it. It is an excellent idea. Do you have any other projects out there that you have used as a pattern for this, or could you give us the background of just why you determined to credit the interest to Treasury?

Mr. HAMILTON. Mr. Dexheimer can answer that.

Mr. DEXHEIMER. Mr. Saylor, that is a matter of policy in working out these new projects, not using the interest component as a credit to the project and returning it directly to the Treasury. We are trying in cases of all the new projects where that is feasible to do it. It is not entirely new, but it has not been used in the past as extensively as we hope to do it in the future.

Mr. ASPINALL. If the gentleman will yield there. We started that with the Collbran project, did we not?

Mr. DEXHEIMER. Yes, sir; this is a very similar formula to that.

Mr. DAWSON. Will the gentleman yield to me?

Mr. SAYLOR. Yes.

Mr. DAWSON. Is that the same formula that you are using on the upper Colorado?

Mr. DEXHEIMER. Yes, sir.

Mr. ASPINALL. The time of the gentleman has expired. Does the gentleman from North Carolina yield?

Mr. SHUFORD. I will reserve my time. The gentleman does not seem to want it.

Mr. ASPINALL. The Chair recognizes the gentleman from Utah, Mr. Dawson.

Mr. DAWSON. Mr. Hamilton, what type of crops do you raise in that area?

Mr. HAMILTON. Lemons, oranges, avocados, walnuts, some vegetables.

Mr. DAWSON. They are not crops that the Government supports?

Mr. HAMILTON. That is correct.

Mr. DAWSON. As a matter of fact, the crops that you mentioned are produced, a big majority of them, in California, are they not, for the Nation?

Mr. HAMILTON. Yes, sir.

Mr. DAWSON. The community of Santa Barbara, does it get any benefit from this water?

Mr. HAMILTON. Santa Barbara is an adjoining community, but they are served by the Cachuma project now being completed under Federal organization.

Mr. HALEY. Will the gentleman yield?

Mr. DAWSON. Yes.

Mr. HALEY. I would like to correct the statement you just made that a great majority of the citrus and so forth is grown in California. They are way behind Florida. As a matter of fact, my district alone produces more citrus than the entire State of California. [Laughter.]

Mr. DAWSON. I will stand corrected.

Mr. ASPINALL. I suggest we get off the citrus and get down to the subject.

Mr. DAWSON. I was referring primarily to avocados and walnuts which you mentioned, Mr. Hamilton.

Mr. HAMILTON. Yes.

Mr. DAWSON. I think they raise none of those in Florida.

What is the reason, Mr. Hamilton, that you do not have your report in? What has been the delay on it? Perhaps Mr. Dexheimer can answer that.

Mr. DEXHEIMER. Because of this rush job, in getting it ready, it was only sent over to the Bureau of the Budget about a week or so ago; and they have not yet reported on it to us, so that we cannot officially transmit it to the Congress.

Mr. DAWSON. How long do you anticipate it might be before we can get the report?

Mr. DEXHEIMER. I hope in the next few days.

Mr. DAWSON. That is all, Mr. Chairman, except to say I want to commend the people down there for taking the interest they have in this project. It seems to me on the surface it is a commendable one.

Mr. ASPINALL. The Chair recognizes the gentleman from California, Mr. Sisk.

Mr. SISK. Mr. Dexheimer, do you have under study at the present time any projects with a total benefit-cost ratio equal to this?

Mr. DEXHEIMER. I do not know of any quite equal to this; no, sir.

Mr. SISK. You would say that probably has the highest total benefit-cost ratio of any project that has been considered at least in recent years?

Mr. DEXHEIMER. Yes, sir.

Mr. DAWSON. Will the gentleman yield to me?

Mr. SISK. Yes; I will yield.

Mr. DAWSON. Do you say it is higher than the Trinity project?

Mr. DEXHEIMER. I believe it is, Mr. Dawson, slightly.

Mr. DAWSON. I wish our chairman was here to hear that statement.

Mr. SISK. I might say to the gentleman from Utah this happens to be the one project that the distinguished chairman has been making an exception to, if I recall. He said many times Trinity is the finest project with the exception of one. I think that is right. By the way, it is a very good project, as I understand, I might say to my friend from Utah.

I would like to inquire quickly with reference to the area to be irrigated. I notice from the map there—can this area up, for example, in the Ojai area be irrigated from this particular reservoir? It cannot, can it?

Mr. DEXHEIMER. Yes, sir. There are pipelines and pumping plants to take care of that irrigation.

Mr. SISK. There would be a considerable lift of water, would there not? Is not this reservoir lower in elevation than the Ojai area?

Mr. DEXHEIMER. Yes, sir; there is quite a lot, and to reach the higher points I think a total lift of around a thousand feet.

Mr. SISK. What is the percentage of the water to be used for domestic and municipal purposes; about 40 percent?

Mr. DEXHEIMER. Yes, sir; 40 percent.

Mr. SISK. And 60 percent for irrigation?

Mr. DEXHEIMER. In the initial stages; yes, sir.

Mr. SISK. I think that is all, Mr. Chairman.

Mr. ASPINALL. The Chair recognizes the gentleman from New York, Mr. Pillion.

Mr. PILLION. As I understand the situation with respect to the plan of the development and the investigation so far, the district itself, the Ventura district, has made an outlay of approximately $770,000 for these studies to date.

Mr. DEXHEIMER. Yes, sir.

Mr. PILLION. And that evidently is a cooperative outlay with the Bureau of Reclamation, so that the Bureau of Reclamation has made an outlay of approximately the same amount; is that it?

Mr. DEXHEIMER. No, sir. We have only made 50 percent of the initial investigation fund. I believe that would be around $58,000, something like that.

Mr. PILLION. In the total scheme here of the repayment, is that $770,000 advanced by the district of Ventura repayable to them or is that an investment, a gift or a contribution, or what is it?

Mr. DEXHEIMER. It is a part of the cost figure that is included in here but would be a credit, I assume, on the ultimate obligation as we work out a contract.

Mr. PILLION. Then they will have that money returned to them?

Mr. DEXHEIMER. No; they will not have it returned, just not have to pay it.

Mr. ASPINALL. Will the gentleman yield?

Mr. PILLION. Yes.

Mr. ASPINALL. I think this is a good place to take care of that. This money was raised by an assessment in the county; is that correct?

Mr. DEXHEIMER. Yes, sir.

Mr. ASPINALL. And expended county funds?

Mr. HAMILTON. District funds.

Mr. ASPINALL. Are not the district and the county almost synonymous?

Mr. HAMILTON. No, sir.

Mr. ASPINALL. Explain the difference there.

I will yield the gentleman a couple of my minutes for the time I'm taking in order to get this cleared up.

Mr. HAMILTON. Actually the Ventura River Municipal Water District is a very small portion of the entire county, roughly about 15 percent of the county's area.

Mr. ASPINALL. And because of the presence of oilfields it is a very wealthy county at the present time; is that correct?

Mr. HAMILTON. That is correct.

Mr. ASPINALL. And an assessment made in this county for this purpose was not an undue hardship on the people generally; is that correct?

Mr. HAMILTON. At this time, that is correct.

Mr. ASPINALL. Do you understand, Mr. Pillion, how they got the funds?

Mr. PILLION. Yes; I understand it, but I am wondering how they are going to get it back.

Mr. ASPINALL. They are not going to get it back. That is their contribution to this project.

Mr. DEXHEIMER. It means they have to pay that much less on the ultimate cost of the project if approved for Federal construction

sometime. If not approved for Federal construction, they have bought a set of plans for that much money.

Mr. PILLION. I see. That is what I wanted to get at. Thank you very much.

Mr. ASPINALL. The Chair recognizes the gentlewoman from Idaho.

Mrs. PFOST. No questions.

Mr. ASPINALL. The Chair recognizes the gentleman from California.

Mr. HOSMER. I desire to reserve my time.

Mr. ASPINALL. The Chair recognizes the gentleman from Colorado, Mr. Chenoweth.

Mr. CHENOWETH. Mr. Hamilton, is there any power in this project?

Mr. HAMILTON. There is no power involved.

Mr. CHENOWETH. What is the total number of acres involved for irrigation purposes?

Mr. HAMILTON. For irrigation purposes, 13,000 acres ultimately.

Mr. CHENOWETH. And you are going to charge how much per acre-foot for that water?

Mr. HAMILTON. The charge to the farmer delivered at the farm will be $36.

Mr. CHENOWETH. Per acre-foot?

Mr. HAMILTON. Yes. That would be by the district.

Mr. CHENOWETH. Have the farmers agreed to pay that amount? Can they afford to pay that amount?

Mr. HAMILTON. They can afford to pay that amount. It is comparable to the amount now being paid by the farmers in adjoining Cachuma project.

Mr. DAWSON. Will the gentleman yield?

Mr. CHENOWETH. Yes.

Mr. DAWSON. How much of that is supplemental water?

Mr. HAMILTON. Actually what happens here is that the lands which are presently under irrigation have an almost adequate supply. So this is new water for the lands which will be put under irrigation.

Mr. CHENOWETH. This is not supplemental water?

Mr. HAMILTON. It is not supplemental water.

Mr. CHENOWETH. How many new acres will it bring under cultivation?

Mr. HAMILTON. Ultimately approximately 11,000 acres.

Mr. CHENOWETH. In new lands?

Mr. HAMILTON. In new lands.

Mr. CHENOWETH. What crops would be produced on the new lands?

Mr. HAMILTON. On the new lands, lemons, avocados, oranges, walnuts, and some vegetables.

Mr. CHENOWETH. What is the value of the land today per acre?

Mr. HAMILTON. The value of the land on the present market without a water supply is approximately $1,000.

Mr. CHENOWETH. Without water?

Mr. HAMILTON. Without water.

Mr. CHENOWETH. That is pretty valuable land.

Mr. HAMILTON. That was a direct answer to your question. It has already taken on some inflation value. Prior to the announcement of the construction of this project it was worth approximately $200 an acre.

Mr. CHENOWETH. What will be the value when the project is completed—per acre?

Mr. HAMILTON. Around the neighborhood of $2,000 per acre, judging from the adjoining lands.

Mr. CHENOWETH. That was $2,000 per acre?

Mr. HAMILTON. Yes; a climatic factor is involved here.

Mr. CHENOWETH. Who owns the 11,000 acres involved?

Mr. HAMILTON. Most of that land is owned in small holdings. We made an investigation of the excess lands and they are less than 1,000 acres total excess lands in terms of irrigable land itself.

Mr. CHENOWETH. What are they doing with the land now?

Mr. HAMILTON. It is being dry farmed, all in private ownership.

Mr. CHENOWETH. It is being farmed now?

Mr. HAMILTON. Yes, sir.

Mr. CHENOWETH. I think that is all.

Mr. DAWSON. Will the gentleman yield?

Mr. CHENOWETH. Yes.

Mr. DAWSON. What about these excess lands? Is the 160-acre land limitation act going to affect this? Are they willing to split up their acres?

Mr. HAMILTON. That was a rather conservative estimate, Congressman. I would say that when the chips come down there will probably be less than 500 acres which will not be entitled to water, because some of those excess lands already have their own water supply and have been credited in the analysis. But it does not constitute, in my opinion, a problem in the feasibility of this project.

Mr. DEXHEIMER. We do not anticipate there will be any difficulty in serving those lands by the time they are ready. They will have complied.

Mr. ASPINALL. The time of the gentleman has expired.

The Chair recognizes the gentleman from California, Mr. Utt.

Mr. UTT. I have no questions, except to make a brief statement with reference to some of the questions of my colleague, Mr. Chenoweth, and that is to the effect it is not unusual in that area for the gross income from lemon groves to be as high as between $1,000 and $2,000 an acre annually, as well as avocados. So that the supplemental water supply, even at the figure of $60 an acre-foot, is a very small percentage as compared with irrigation in some places where the crops are not that valuable. So I think it is far more feasible at $35 to $40 an acre-foot than it might be in some other sections at even $5 an acre-foot.

Mr. CHENOWETH. Will the gentleman yield.

Mr. UTT. Yes.

Mr. CHENOWETH. I would just like to state that I am very much impressed with the statement made by Mr. Hamilton. It appears to be a very good project.

Mr. UTT. It appears to me to be so also.

Mr. CHENOWETH. I can see that is very valuable land, more valuable than some of the land that we have been dealing with in other projects.

Mr. UTT. Lemon groves are selling from $4,000 to $4,500 an acre after they are 5 or 6 years old, and the development of the water will increase the value of the area very greatly, and a fair portion of the tax burden will be shared by the oil companies in the Ventura fields.

I yield back the balance of my time.

Mr. ASPINALL. The Chair recognizes the gentleman from North Carolina now.

Mr. SHUFORD. I yield my time to the gentleman from Pennsylvania.

Mr. SAYLOR. Mr. Hamilton, on plate 3 of your report, stating the runoffs, does that indicate the total amount of water available over the years from these two creeks?

Mr. HAMILTON. That is correct, available for the project.

Mr. SAYLOR. That is the only water that you are considering using on this project; is that right?

Mr. HAMILTON. That is correct.

Mr. SAYLOR. Even though it is called the Ventura project on the Ventura River?

Mr. HAMILTON. Essentially all the water will come down from the Ventura River from above the diversion project.

Mr. SAYLOR. I notice you have that divided up, your 40,500 acre-feet annual use, and have estimated that 3,000 acre-feet would be for prior use. What is that?

Mr. HAMILTON. There are prior users of water downstream from the diversion point on the main Ventura River, and they are entitled to that water. This water that I have tabulated here is a total water which passes the diversion point, plus the water which flows directly into the reservoir. We must deduct the rights of the people downstream for the water for prior use.

Mr. SAYLOR. They are the owners in between the dam and the ocean?

Mr. HAMILTON. The city of Ventura has some rights down here. They hold the major rights, and there are a few smaller rights up along the river here [indicating].

Mr. SAYLOR. Then you have charged 3,400 acre-feet to evaporation. Who figured out the evaporation losses?

Mr. HAMILTON. It was figured out in my office, doublechecked.

Mr. SAYLOR. The reason I ask, we had some figures here last year that were checked and doublechecked and we were assured they were correct, and they finally admitted there was an error of 600 percent in evaporation-loss figures. So I am just wondering whether or not you might go back, Mr. Hamilton, and check your evaporation figures and send us some word that you have checked and found they are correct, and if there is any error in them, what error there might be.

I also notice that you have 6,300 acre-feet for spill. What is that?

Mr. HAMILTON. That is the amount of water which occurs in very wet years which does not have any diversion capacity to carry it into the reservoir. Those waters would run on down the river and out into the ocean. A very minor amount of water would spill through the reservoir itself from the tributaries flowing directly into the reservoir. This is based on the most critical period of record. At other times in previous wet periods there would be considerable more spilled to the ocean than is shown on this chart.

Mr. SAYLOR. It is possible, considering the dry period 1920–30 as indicated on your map, that this reservoir would have no water in it at all. Is that correct?

Mr. ASPINALL. The time of the gentleman has expired. Would the gentleman from California, Mr. Hosmer, yield or does he wish to use his time?

Mr. HOSMER. I will yield.

Mr. HAMILTON. Refer to plate 5. The Casitas Reservoir operation assumed that if the reservoir had been completely full in 1918 that the most critical period for the operation which could have occurred historically would have been for the succession of dry years to have followed that similar to the period from 1918 to 1944, and we operated the reservoir theoretically over that period. You will see by that chart that the storage in the reservoir has gradually depleted over these dry years until in 1937 the series of wet years started again and the reservoir gradually would have refilled until 1944, at which time it would have been completely full and spilled, starting on another dry period. What we sometimes loosely refer to as cyclic storage.

Mr. SAYLOR. Would you check your evaporation figures, Mr. Hamilton, for us, or have somebody in your office do so to make sure they are correct? Then I might have more confidence in the project. Thank you.

Mr. HAMILTON. We attempted to do our best.

Mr. ASPINALL. As far as the committee is concerned, Mr. Hamilton, you do not need to advise the committee unless you find an error. If you find an error, we would like to know about it. If you do not find any error, we will take what you have stated now.

The gentleman from California still has 2 minutes left if he wishes to use it.

Mr. HOSMER. I yield back my time.

Mr. ASPINALL. Does anyone else have a question?

The Chair has two questions.

Mr. Dexheimer, will it be the policy of your Bureau to require the contract to be properly executed before construction starts on this project, if it is authorized?

Mr. DEXHEIMER. Yes, sir. I do not think we will have any difficulty in doing that.

Mr. ASPINALL. Now, Mr. Hamilton, if you would go to the map and explain to the committee where the pumping stations are and the lifts that are necessary to get the water to the various areas of the district, and also explain if there is any present irrigation by pumping facilities in the district at the present time.

Mr. HAMILTON. As proposed in the project, the water would be pumped over about an 800-foot lift with a pumping station at the dam to furnish this valuable lemon and avocado land out near the ocean. Also 500 pumping stations to lift water approximately 600 feet from the reservoir into the main part of the agricultural service area. A certain amount of municipal water would also go through the system. Finally, there would be another 200-foot lift to take the water on up into this irrigable land in what is known as the upper Ojai Valley, a lift of about 800 feet on the average from the reservoir.

Mr. ASPINALL. From whom will you purchase the power?

Mr. HAMILTON. No arrangements have been made at that point yet. That would be a district responsibility.

Mr. ASPINALL. Is there any surplus power in that area?

Mr. HAMILTON. Southern California Edison Co. presently has responsibility of servicing the area. It is possible to develop power by diesel plants.

Mr. ASPINALL. Do you know what charge is contemplated at the present time for the power?

Mr. HAMILTON. I do not have that answer, but I can get it for you from our computations.

Mr. SISK. Will the gentleman yield there?

Mr. ASPINALL. Surely.

Mr. SISK. You would have had to know that rate in order to have figured your cost ratio?

Mr. HAMILTON. Yes; we knew that rate. I do not have it at the moment.

Mr. SISK. You do have it; but not at the moment?

Mr. HAMILTON. Yes.

Mr. ASPINALL. Will you explain to the committee if there are any pumping facilities in that area presently being used for irrigation purposes?

Mr. HAMILTON. Practically all the water is pumped from ground water for irrigation purposes. There is no integrated system like this for transferring water from one area to the other. Such water as is being developed here on the small distinct reservoir is delivered by gravity to the Ojai Valley. A certain amount of it is released down to the river for use of the city of Ventura.

Mr. ASPINALL. How much pumping is being done in this area at the present time?

Mr. HAMILTON. They are probably pumping around a neighborhood of 8,000 acre-feet annually. I would imagine that the average pump lift would be somewhere in the neighborhood of 125 feet.

Mr. ASPINALL. Will the construction of this project have any adverse effects upon pumping conditions?

Mr. HAMILTON. Actually, the construction of this project will improve pumping conditions because of return water.

Mr. ASPINALL. Are there any further questions?

Mr. DAWSON. I would like to ask if he would not furnish to the committee the cost of pumping water.

Five hundred feet is a pretty high lift.

Mr. HAMILTON. I could give an approximation now, to be verified later. Annual pumping costs over the payout period will in terms of power probably amount to around $150,000 to $200,000 for energy costs.

Mr. DAWSON. Figuring what rate per kilowatt?

Mr. HAMILTON. That is the part I do not remember. I just remember the total figure.

Mr. SISK. Will the gentleman yield there?

Mr. DAWSON. Yes.

Mr. SISK. You mean that will be the total amount of money expended per year for pumping?

Mr. HAMILTON. On the average. The average over the payout period per annum.

Mr. SISK. You certainly must have a very low rate in order to keep it down that low, in view of the costs of pumping, for example, on a single farm in my area. I know cases that run higher than that for a single farm. Of course, it is a pretty good-sized farm. The annual power rate is more than that.

Mr. HAMILTON. Perhaps I did not make myself clear. In excess of $150,000 annually.

Mr. SISK. That is the figure I have in mind. When I consider that I know one particular ranch that has a quarter-of-a-million-dollar

power bill each year, with the volume of water—I do not know how many thousand acre-feet of water you propose to lift that high, but that sounds like a very small sum for pumping costs.

Mr. DEXHEIMER. It only involves 13,000 acres in this, Mr. Sisk. Perhaps that will help your arithmetic.

Mr. SISK. That is all.

Mr. ASPINALL. Thank you very much.

(Discussion off the record.)

Mr. ASPINALL. At this time the Chair is glad to call to the witness table Mr. George M. Purvis, president of the Ventura River Municipal Water District. I will also call up Mr. Neil Ensch, agriculturalist from the Ventura area.

Mr. Purvis, could you advise me as to how much time you wish to take in your presentation so I can divide it between you two gentlemen?

Mr. PURVIS. Congressman Aspinall, I will take about 12 minutes.

Mr. ASPINALL. Fine. You may proceed. We are glad to have you before the committee.

STATEMENT OF GEORGE M. PURVIS, PRESIDENT, VENTURA RIVER MUNICIPAL WATER DISTRICT, CALIFORNIA

Mr. PURVIS. Mr. Chairman, my name is George M. Purvis. I am president of Ventura River Municipal Water District.

From our district's name the impression is given that we are a city or municipal utility. That is not correct.

Our district covers approximately 90,000 acres of land in the northwestern portion of Ventura County, of which approximately 21,000 acres are arable. Taking account of probable future developments with an adequate water supply, it is estimated that the urban area comprising the cities of Ventura and Ojai and several small unincorporated communities would occupy about one-third of the arable land. The remainder would be used for agricultural purposes. Therefore, while we are deeply concerned with providing an assured water supply for domestic and industrial use, we have an equal, if not greater concern with development of water for maintenance and expansion of agriculture through irrigation.

When our district was formed in 1952 we had a choice of several types of public water agencies under which to organize. In California there are water districts, waterworks districts, irrigation districts, conservation districts, utility districts, and others. After detailed study, the organization committee chose the Municipal Water District Act of 1911, as rewritten in 1951. This was the most up-to-date enabling act available, and it seemed to fill our needs. Since the act was rewritten in 1951 most of the new water development districts formed in California have been organized under its provisions.

This type of district has broad powers essential to obtaining a water supply for all beneficial purposes. These include the authority to levy taxes, issue bonds, and contract with the United States and other public agencies.

The word "municipal" in our district name is required by State law as identification of the act under which the district was formed,

and is not a descriptive adjective indicating our purposes or authority.

My purpose in appearing before you today is twofold. First, I should like to stress the need for development of an assured water supply in the area of our district. Second, I want you to know that our people favor this partcular project for construction by the Bureau of Reclamation and are willing to pay for it.

NEED FOR WATER

In our area there is only a very limited amount of underground water storage. Except for the Ojai Basin, which cannot store enough water for its own needs, the drainage basin is steep and shallow. When rains come the water runs off to the ocean. There are no deep gravels to hold and store it in for future use. Such storage can be provided only by surface reservoirs. Our only surface reservoir is a 7,000 acre-foot reservoir created by Matilija Dam. We have dry periods of several years between the wet periods of heavy rainfall, which limits Matilija Reservoir to a present safe average annual yield of less than 2,000 acre-feet. That is woefully inadequate.

Therefore, under present conditions of irrigation and municipal and industrial development a shortage of water exists. Ground water and surface runoff are used extensively for both irrigation and municipal and industrial purposes. The present demands on these sources are exceeding the long-range safe yield which can be obtained from them. A critical water-supply situation for these uses exists under present water-supply development conditions whenever a dry year occurs, and an extremely critical shortage exists under a series of dry years. Increase in irrigated acreage, therefore, will depend upon the development of an adequate additional water supply. Likewise, municipal and industrial expansion would require relatively large amounts of additional water.

In an effort to keep up with the demand for water the city of Ventura has drilled several wells near the ocean. These wells are about 1,500 feet deep and pump from below sea level. For the past several years, these wells have been the principal source of water for the city during the summer months. The water is not very good and there is always danger of salt-water intrusion. We are literally mining water stored many years ago. These wells do not afford a permanent water supply and it would appear desirable that they be maintained to serve the purpose for which they were originally drilled, the provision of an emergency supply only.

The proposed Ventura River project will provide holdover storage sufficient to meet increasing demands for agricultural and domestic purposes in dry periods as prolonged as the worst drought covered by our records.

Mr. Hamilton and Mr. Dexheimer have presented the technical features of the project, and I should like to present the other phase of getting a project of this sort across, and that is getting the people to take some concerted action. I feel that if the two are weighed together, the technical and the organization of the people, that one is as great as the other and that we cannot proceed without technical phase until the people are ready to take the necessary action.

As Mr. Hamilton mentioned concerning the rainfall of our area, we have either a feast or a famine as far as the rainfall is concerned. This began to catch up with our area about 25 to 30 years ago, and the people began to ask themselves, "What shall we do about our shortage of water?" Serious shortages had begun to develop.

Consulting engineers were hired to examine the situation in the area. After a survey of the area they found that there was no additional water to pump from the ground—that had been our sole source—and it was necessary if we were to develop any new water, to conserve the runoff water.

A number of people at that time were well aware that action ought to be taken, but not enough people were of this frame of mind, and consequently the years drifted by and nothing was done.

Finally, in 1944 the Ventura County Flood Control District was organized under a special act of the California State Legislature, and the people thought this would be the vehicle needed to solve the problems.

I have a map which shows our county. The area was divided into zones: Zone 1, which our present district is comprised; zone 2; and zone 3. Zone 4 represented mountainous land that was of no use.

This district was operated by the directors of the whole county, but each district could finance any project and operate it independently of the other. This was in 1944.

Eight years later our area again asked themselves, "Where is this vehicle taking us?" Little had been accomplished previous to that. The center zone [indicating] had come to the same conclusion and had virtually withdrawn from the district by establishing a water district of its own. Our area, because of this and because of one little project, the Matilija Reservoir, which had been built with 7,000 acre-feet capacity, and with a number of attendant unfortunate circumstances which left a sour taste in the people's mouth as far as any development was concerned, decided that they would have to organize a water district in this watershed as has been pictured to you on our map for the sole purpose of water development.

Meetings were held throughout our district and many organizations contributed to the answer as to the type of district that should be formed. Labor played a significant part. The oil workers, CIO, for instance, called a number of meetings and established committees of their own to help follow the thing through. The upshot of it was the formation of our present district by a two-thirds majority vote in an election on October 17, 1952.

So our district was formed, our directors elected, but we had no money, we had no staff, we had not even a place to meet. So it was necessary for us to get started and decide what should be done. We knew that apathy existed in the people's minds as far as any kind of water development was concerned.

We finally established an office, and after making some studies of our district's needs and of the public feeling, it seemed to us that we should get along further and faster if we were to call in the Reclamation Bureau. There was definitely sentiment in favor of the Bureau. In 1952 we contacted them and asked them if they would help us, and this they agreed to do.

Immediately when we had made that decision we said, "When can you get started?"

the cost. The same, of course, is not true with respect to irrigation users. The cost of water to them is a major item of expense and the amount they can afford to pay is definitely limited.

If this project is authorized and constructed under reclamation law the agricultural allocation, amounting to 57 percent of project costs, will be repaid without interest within a period of 50 years. If the project were financed by a local bond issue the agricultural allocation would have to be repaid with interest on a maximum period of 40 years from the date the money was advanced. Our studies indicate that the difference in cost between these alternatives is very substantial.

The general taxpayers, who are the indirect beneficiaries of the project, recognize the equity of and are agreeable to paying a portion of the agricultural water cost. With interest-free financing of the irrigation facilities, the difference between the cost of water and the amount the farmers can be expected to pay is not great. However, with bond financing this difference becomes unreasonable. Consequently, without reclamation financing the financial feasibility of the project becomes questionable.

After considering in detail this basic problem of how to proceed, the board proposed that the report of the Bureau of Reclamation be processed for authorization of the project as a reclamation project, and through the press and special public meeetings sought the people's reaction. Endorsements of our action came pouring in from farm organizations, labor unions, civic groups and individuals. We feel that it is particularly significant that the overwhelming sentiment in our district favors this proposed reclamation project and that there is no substantial opposition.

REPAYMENT

If the Ventura River project is authorized for construction as a reclamation project, our district will contract to operate the facilities and return to the Government an amount equal to the costs of construction. Payments would be made over a period of years with interest on the portion of the costs allocated to municipal and industrial purposes.

It is estimated that the demand for project water will be small in the early years of project operation, but will increase steadily throughout the repayment period. In these circumstances the benefits from the project, both direct and indirect, will be greater in the later years of the repayment period. With this situation in mind our board of directors feels that repayment obligations should be geared to water use so that the principal burden of repayment will fall on those persons who are to derive the principal benefit. This is the basis of repayment we hope to secure when the contract between the district and the United States is negotiated. Attached hereto is a copy of a resolution which our board adopted some time ago relating to this subject.

CONTRACT

It is our understanding of procedure that when this project is authorized the district and the Bureau of Reclamation will be in a position to negotiate a contract for operation of the project and return to

They said, "Not until July 1, the reason being that money has not been set aside in the Bureau for this particular project."

We said, "What if we would advance the money?"

Well, they had not ever done that before, but they said they would look into it. We had to borrow the money and that we did. We had levied no taxes yet, but we borrowed the money, and they agreed to start in at once.

They said this would be a 2-year investigation, but because of the pressure that we continually put on them and because of their willingness to help, and knowing the need that existed here, they got the report out 1 year later. This came out in the spring of 1953.

This is what it said:

> You do have available water to develop. You do have one good dam site. You do have the ability to pay for it, and it will cost you $27½ million.

We presented all of this information to the people as we had always done. Many endorsements came in and people began to feel a new hope as far as water development was concerned.

It was evident that this was the thing that the community wanted. It was in the spring of 1953. The report was to be finally written up by July 1954. And then it had to be submitted to the various agencies, of which you know. Then we said, "What are we going to do all of this time? Is this project just going to sit here? Why cannot we do something to further this project?" And we raised the question of preconstruction work.

It may sound like we have money running out of our ears in Ventura, but we do not. We did not have that kind of money at all, and we do not now. The Bureau had never done this sort of thing, they said, but if we would put up the funds they thought they could do it. It took some negotiating before they finally agreed. Since we had no money, we borrowed it. We have been paying that money back and we still have more to repay. The work had to be extended over a 2-year period, although we would have liked to have done it in 1 year. But it was necessary to extend it over a 2-year period in order to be able to pay it out of tax funds. We are still borrowing money for next year's payment, but we know we can eventually repay it all.

Submission of the report put before our district the problem of how to proceed. The two practical alternatives available for consideration were (*a*) design and construction by private contract, financed by a general obligation bond issue, or (*b*) authorization and construction as a Federal reclamation project, the costs to be repaid by the district in accordance with reclamation law.

Two principal reasons convinced us that we should seek a reclamation project. First, we and our constituents had confidence that the Bureau of Reclamation would design and execute complete plans for a water project that was physically safe, adequate to meet requirements, and economically sound.

They were acquainted with the businesslike way the Bureau of Reclamation was completing the Cachuma project in our neighboring county, Santa Barbara. Consequently, the Bureau of Reclamation was in a position to inspire the confidence of the people of our district.

Our second reason is related to our basic needs for water. The cost of water is not a major part of the budget of most industrial or municipal users, and they will procure what they need regardless of

the Government of its investment (together with interest on the municipal and industrial allocation) pursuant to reclamation law. Before we execute such a contract we intend to submit the matter to the popular vote of the people in our district. We do not expect the Federal Government to commence construction of this project until our district, with the consent of its people, has bound itself to repay the costs involved.

However, we feel that it is urgent that construction be commenced at the earliest practicable date. To this end our district is currently financing preconstruction work, including the preparation of final design and specifications. In July of 1954 we entered into a contract with the Bureau of Reclamation under which they commenced this work wholly financed with district funds at an estimated cost of $720,000. While we understand this procedure is unusual it will lead to conclusion of this preconstruction work on the dam and reservoir by the end of this calendar year and permit actual construction as soon as the project is authorized and funds are available.

The current drought period has now continued for some 10 years. It is reasonable to expect a period of normal rainfall to commence before very many more years pass. We need to have a reservoir ready to conserve that runoff.

Many people have shown much interest in this project. We know you have. We know Congressman Aspinall gave up part of his vacation and make a quick trip to go over the project with us. Senator Kuchel, Senator Knowland, Mr. Dexheimer, and many others have visited the project, and they feel it is worth while. We know that you have set aside your time here in a very busy schedule, and that we appreciate very much. But we bring this to you now as our project. We have done as much as we can on it, and we hope that we will get authorization this session so that we can make use of the preconstruction work that has been done and get started on construction early next year.

I should like to close by showing you some effects of a shortage of water in our area. I was traveling up in the Ojai Valley the other day and I noticed 60 acres of citrus that was completely dead. In looking at these pictures I hope you will not get the idea the Ojai Valley is a barren valley. It is a beautiful valley and there are many fine orange groves still in production. But farmers are worrying every day that these fine groves will not remain.

Here is approximately 60 acres of an orange grove that is dead from lack of water. Perhaps these can be passed around. I have three of the same picture.

Cattle are grazing in the orange grove, of course, an unheard of thing in a good citrus grove.

Notice on the other side of the picture a barren hillside and a dry field. This could be good avocado land because it is relatively frost free if it had water. Even the knoll can produce good avocados. I do not know that you can tell the trees are dead, but here is a closeup of the orchard [distributing pictures]. It shows the catastrophe that has come to this orchard and can come to the whole valley if something is not done.

But just to let you see that we do have some fine orchards and to let you see what water will do, note this high-producing orange grove [showing pictures].

Citrus cannot grow without irrigation. Property such as this must be saved.

Mr. Chairman, I would like to close by offering for the record Resolution No. 65 of the Ventura River Municipal Water District, captioned "Resolution of Policy Concerning Payment of Capital Costs."

Mr. ASPINALL. Without objection, the resolution will be made a part of the record.

(The resolution referred to follows:)

VENTURA RIVER MUNICIPAL WATER DISTRICT

RESOLUTION No. 65

RESOLUTION OF POLICY CONCERNING PAYMENT OF CAPITAL COSTS

Whereas it appears that the Congress of the United States of America during its present session may authorize the Ventura River project for construction by the Bureau of Reclamation as a Federal reclamation project; and

Whereas the Bureau of Reclamation has indicated that as soon as such authorization is obtained negotiation of a repayment contract between the United States and the Ventura River Municipal Water District will be appropriate; and

Whereas section 22 of the Municipal Water District Act of 1911, under which the Ventura River Municipal Water District was organized, provides that "the board of directors, so far as practicable shall fix such rate or rates for water as will result in revenues which will pay the operating expenses of the district, provide for repairs and depreciation of works owned or operated by the district, and provide a reasonable surplus for improvements, extensions, and enlargements, pay the interest on any bonded debt of the district, and provide a sinking or other fund for the payment of the principal of such debt as it may become due"; and

Whereas it is the intention of the board in complying with this provision of the Municipal Water District Act of 1911 to attain as equitable a distribution of project costs as possible; and

Whereas it is the opinion of this board that a repayment schedule based upon and proportional to the estimated annual use of water to be developed by said project, will attain such equitable distribution of project costs: Now, therefore, be it

Resolved by the board of directors of Ventura River Municipal Water District, That, in the event the construction of said project is authorized by the Congress of the United States of America, the declared intention and purpose of the board shall be:

1. To establish a schedule of resale rates which, being consistent with the ability of water users to pay, will result in the greatest practicable portion of project costs being borne by water users.

2. To negotiate with the Bureau of Reclamation for a repayment contract which shall provide either:

(*a*) That the United States of America furnish water to this district at such rates as will produce revenues during a 50-year period sufficient to cover the costs of construction of such dam and related facilities, or

(*b*) That, if a repayment obligation-type contract be made, the annual payments by this district to the United States of America to repay the costs of construction shall be made over a period of 50 years and shall be proportional to the estimated annual use of water to be developed by such project.

Passed and adopted the 11th day of May 1955.

GEORGE M. PURVIS,
President of Ventura River Municipal Water District.
CHARLES W. PETIT,
Secretary of Ventura River Municipal Water District.

Mr. ASPINALL. Thank you very much, Mr. Purvis.

At this time the Chair would ask Mr. Ensch to make his statement.

STATEMENT OF NEIL ENSCH, AGRICULTURIST FROM THE VENTURA AREA OF CALIFORNIA

Mr. ENSCH. Mr. Chairman and ladies and gentlemen, my name is Neil Ensch. I am managing partner of 150 acres of citrus in the Ojai Valley. We have owned this piece since 1937. At the time we acquired the grove we had 2 wells, each less than 300 feet and each powered with a 20-horse motor.

Subsequently, as the dry years came, and once in awhile a wet year in between, we drilled four more wells. The first well was 400 feet, the second well was 520 feet, then 550, and then 740. As a cost comparison, the 740-foot well was powered with a 120-horse diesel, which costs a lot of money to run as against the 20-horsepower motor on the first well.

The water level fluctuated from 70 to 315 feet on one piece. This piece is on good water land. The other piece is toward the edge of the valley near the foothills. The well on that piece—and by the way the nice orchard you saw is watered from this well—was dry at 520 feet.

In the meantime our neighbors were having the same trouble; 1951 was a bad year, and it was a question of survival with most of us.

The rains came in the winter of 1951–52. We had 40 inches against 9, 11, and 10 inches the prior 3 years. The basin filled somewhat, and in the summer of 1952 after the rains we produced 59,000 boxes of oranges as against 36,000 the dry summer preceding. The second summer we produced 76,000 boxes against the 36,000.

Now I make these points to impress that a citrus tree without water simply cannot exist, and a citrus tree with water and the soil and climate we have in the Ojai Valley will allow us to live comfortably and pay a little more for the water.

On neighboring ranches—just as an extreme comparison, one ranch in the eastern end of the valley that does not have the water situation we have, which grove ordinarily produces fifty to sixty thousand boxes a year, in 1951, the dry summer, picked 1,400 boxes. The rest were not worth picking. The trees were in a wilt, the fruit was the size of walnuts, and it simply was not worth picking. It would cost more to pick it than to leave it on the tree.

Now that is briefly our trouble. One year we are on top and the next year we wonder if we are going out of business, and not only is it irony but it is tragedy.

The Ventura Valley as a whole, to my knowledge, produces none of the crops in surplus supply nationally and certainly not the Ojai Valley. The chief crop of the Ojai Valley is citrus.

Briefly, this is what we are asking for and why I am here today representing the growers of the valley. As I say, our farm is large. The rest are smaller farmers and I came because I had a little more time than the rest. The rest are all busy. They have spent their life acquiring what they have today and they are in danger of losing their entire life's hard work because of this water problem. What we are asking for is survival. If the area is to be developed further and if we are to exist, it will necessitate the storage of floodwaters in wet years to take us over the dry cycles.

Now I will follow Mr. Purvis with a couple of pictures. I present these because they are close to my heart. The one picture shows a

lemon grove that 2 years ago produced 13,000 boxes from 10 acres, and with lemons worth more than $2 a box you can judge that it is a high-income-producing land. My friends from the Midwest do not understand me when I talk about land being worth more than $100 an acre.

This vacant piece with all the rocks is at the present time being derocked. We have a couple of bulldozers over there. It is my desire to plant this if I can find some indication of water being captured in the dam or—that is the only way I know it could be.

The log on the well on this piece shows that the first 50 feet is an unbroken formation of gravelly silt loam; that is why the valley will produce deep-rooted crops. We can sprinkle the grove, use all the latest methods we have learned in agriculture. We now have better tree stocks which give us better root systems.

People ask me, "Why are you doing that?" Well, hope springs eternal. I do not know why I am doing it. I just have so much confidence that some way, somehow the water will be there, and when it is there it is in my blood to plant.

On behalf of my farmer friends in the valley and myself, I wish to thank you for having me here today, and I hope you will look at our proposition favorably.

Mr. ASPINALL. Thank you, Mr. Ensch.

(Discussion off the record.)

QUESTION PERIOD OF GEORGE M. PURVIS AND NEIL ENSCH, ACCOMPANIED BY ROBERT WILLARD, CHARLES PETIT, AND LELAND BENNETT

Mr. ASPINALL. The Chair recognizes the gentlewoman from Idaho, Mrs. Pfost.

Mrs. PFOST. Mr. Chairman, I would like to ask whether this reservoir will inundate valuable land, farm homes, and that sort of property, or is it a wasteland?

Mr. PURVIS. I would say that all land is fairly valuable that is low enough to be cultivated, that is, if it is not mountainside. However, in this particular case we were fortunate in having the reservoir located in the least valuable cultivated lands, and the reason is they have never had any water to develop the area. It has practically all been dry farms. So the value of the land has never been built up to any extent and there are not many residences out through the Santa Ana valley as compared to most of the rest of the district.

Mrs. PFOST. But there are quite a few residences in the reservoir area?

Mr. PURVIS. There are some.

Mrs. PFOST. Will there be any gravity-flow irrigation from the reservoir?

Mr. PURVIS. There certainly will. There are a number of nice citrus orchards below the reservoir in close to the city of Ventura, and these have been irrigated from the water that has been pumped from the Ventura River. They will continue to be served, and so will the city of Ventura by the gravity water. When the reservoir is full or nearly full it will provide gravity for irrigation farther up in the district.

Mrs. PFOST. But largely the water must be pumped?

Mr. PURVIS. Probably. I do not know the figure offhand, but probably half of it at least.

Mrs. PFOST. Approximately half of it is going to be served by gravity flow?

Mr. PURVIS. I would think that is probably true.

Mrs. PFOST. I believe Mr. Ensch mentioned that you have to continue digging deeper and deeper and deeper on your wells. Is that due to this continued drought or is there apparently a reservoir underground? Or do you depend entirely upon just a water level that has been created by some of the pumping upstream and some of the other spots? I presume you have reservoirs upstream.

Mr. ENSCH. There is a basin, and the water level as the farmers say, yoyos up and down.

Originaly the 1 well, less than 300 feet deep, took care of 100 acres. That requires a lot of water. And the last well, as I say, was 740 feet.

Mr. ASPINALL. The time of the gentlewoman has expired.

The Chair recognizes the gentleman from Pennsylvania, Mr. Saylor.

Mr. SAYLOR. Mr. Purvis, you pointed to the map of Ventura County divided into four zones. Am I correct in my analysis of your statement that zone 1 was the area which originally made the negotiations with the Bureau of Reclamation?

Mr. PURVIS. Yes.

Mr. SAYLOR. And that then because zone 2 had similar problems you have united and zones 1 and 2 are now combined and would be in the area served by this project?

Mr. PURVIS. No. There are separate watersheds. Zone 2 represents another watershed, and we are in a watershed by ourselves. Our plan of development in Ventura County is now proceeding on a watershed basis. Zone 2 has a district called the United Water Conservation District. They are working on plans for water development by themselves.

Mr. SAYLOR. Zone 3 has also another watershed; is that correct?

Mr. PURVIS. That is right.

Mr. SAYLOR. Then I heard you make a comment with regard to an area designated as zone 4. Am I correct in my understanding you said that land had no use?

Mr. PURVIS. There is quite a little mountainous area in Ventura County, and my understanding is that all useless land was lumped into one district and called zone 4.

Mr. SAYLOR. The reason I ask that, I never thought I would hear anybody from California admit any land within the confines of the State was useless. [Laughter.]

Mr. SISK. Will the gentleman yield?

Mr. SAYLOR. I will be delighted to.

Mr. SISK. That is not useless. That is good land because it helps catch the water that falls and runs down here. [Laughter.]

Mr. SAYLOR. I would like to commend Mr. Purvis and Mr. Ensch, both of you, for your statements here before this committee and your presentation.

Mr. Ensch, I feel certain the reason you want to go ahead is just the typical American reason that you see possibilities in the future

development of this area, and I commend you for your desire to go ahead.

Mr. ENSCH. Thank you.

Mr. ASPINALL. The Chair recognizes the gentleman from Florida, Mr. Haley.

Mr. HALEY. Mr. Chairman, I only have two questions.

In your statement you said before you executed a contract with the Federal Government you would submit this matter to a proper vote. What would the proper vote be? Would that be the vote of just this particular district?

Mr. PURVIS. We hope that if you authorize this project in this session we shall immediately start negotiations for a repayment contract, and as soon as this is consummated we want to submit it at once to a vote of the people in Ventura River Municipal Water District, which you see on the map as zone 1. I have every confidence that they will approve the contract which we negotiate, and then we will probably be back seeking an appropriation to get going on the dam.

Mr. HALEY. I notice in Mr. Dexheimer's statement he said ad valorem taxes would be collected. I presume you already have an authorization from your State legislature, and I presume that that authorization is very broad in its application as to levying of ad valorem taxes in this particular district.

Mr. PURVIS. We feel we are fortunate in having selected a very good act to organize under, called the Municipal Water District Act, which incidentally is not limited to cities but includes all areas. We have unlimited taxing power and we are responsible only to the people in our district. There is no one other than that to restrict us.

Mr. HALEY. I reserve the balance of my time, Mr. Chairman.

Mr. ASPINALL. The Chair recognizes the gentleman from Utah, Mr. Dawson.

Mr. DAWSON. Do you not have any district restriction on the amount of tax you can levy?

Mr. PURVIS. No; we do not.

Mr. DAWSON. In other words, the sky is the limit?

Mr. PURVIS. The sky is the limit. We just have to use our good sense.

Mr. DAWSON. I understood you to say that you are pumping 700 feet in some instances, Mr. Ensch.

Mr. ENSCH. The one well was bottomed at 740 feet.

Mr. DAWSON. What are your pumping costs on a 700-foot lift?

Mr. ENSCH. They will depend upon the water level. On an acre-foot it will be from $25 to $30 a foot.

Mr. DAWSON. How much?

Mr. ENSCH. From $25 to $30 an acre-foot.

Mr. DAWSON. Do you have any estimate as to what these pumping costs will be on the project itself?

Mr. ASPINALL. If my colleague will yield. We have a revised figure here that comes up from the Bureau representatives to the effect that the pumping power rate is 10 mills and that the total annual cost of power for pumping for this project is $52,000, not $150,000.

Mr. DAWSON. Fifty-two thousand dollars annually?

Mr. ASPINALL. That is right.

Mr. DAWSON. That is all, Mr. Chairman.

Mr. ASPINALL. The Chair recognizes the gentleman from North Carolina, Mr. Shuford.

Mr. SHUFORD. I would like to ask a few questions.

Mr. Purvis, on this reservoir site that you will have to acquire the lands to establish, do you have to have a condemnation proceeding or can arrangements be made?

Mr. PURVIS. Yes, we will.

Mr. SHUFORD. How long do you think that will take?

Mr. PURVIS. That is certainly one of the things we have been considering, because if it were going to take very long, we would like to have it gotten out of the way. But our attorneys advised us that will not take any great length of time. Mr. Willard, our attorney, is here and probably can answer you more definitely on that than I can.

Mr. SHUFORD. But you do not contemplate you will have to go through the highest court in order to get it through?

Mr. PURVIS. Let us put it this way: In our area there is one large ranch called Casitas Ranch, and they like their home very much, just like to stay there. When we got started with our investigations, the preconstruction work which involved some damages from core drilling and whatnot, we thought might cause some difficulties with resulting court trials. However, we have met with the owners, we have worked out all of our agreements with them. We have taken nothing to court. We have paid them in full for all the damages for which they had put in claims, and I anticipate that we can continue to acquire this land in a similar fashion.

Mr. SHUFORD. What amount have you in this contract for the purpose of the reservoir site?

Mr. PURVIS. Could I refer that question to our engineer, Mr. Bennett?

Mr. SHUFORD. Yes.

Mr. BENNETT. The figure is in the Bureau report and I think it is in the neighborhood of $1,900,000.

Mr. SHUFORD. Approximately $2 million for the land for the reservoir?

Mr. PURVIS. Yes.

Mr. SHUFORD. How much of this water is to be used for the city of Ventura as a water project for that city as compared with the irrigation project?

Mr. PURVIS. A director of our district and the mayor of Ventura, Mr. Petit, could probably answer that question very well. Did you hear it, Mr. Petit?

Do you mind directing the question to Mr. Petit?

Mr. SHUFORD. I will be glad to have him answer the question if it is all right with the chairman.

Mr. ASPINALL. He is before the committee.

Mr. PETIT. I am Charles W. Petit. I am mayor of the city of Ventura, which owns and operates the water system that supplies the city of Ventura and quite a bit of adjacent land, some of which is under irrigation. At the present time we are using a total of about 6,000 acre-feet of water, and within the next 10 or 15 years we think that figure may double. We may be using 12,000.

Mr. SHUFORD. This project you have here is essential for the water supply of Ventura?

Mr. PETIT. The city expects to get water from this project. That is true.

Mr. SHUFORD. And expects to get a large portion of the water or at least enough water to supply its needs for a great number of years to come?

Mr. PETIT. The growth of the city will require another 6,000 acre-feet of water.

Mr. SHUFORD. And it is in the interest of the growth of the city that you think that this is probably necessary?

Mr. PETIT. The city has been interested in a development on this river for many years, which is its historical water supply. The city gets the water that it uses now from the annual flow of the river.

Mr. SHUFORD. Under this dam your arrangement will be with the district so that they would guarantee to the city of Ventura a sufficient supply of water to last you for some great number of years?

Mr. PETIT. That is our hope.

Mr. SHUFORD. It is a project that would be of great benefit to Ventura eventually for the purpose of supplying their water?

Mr. PETIT. I would say "Yes."

Mr. SHUFORD. Thank you. That is all.

Mr. ASPINALL. The Chair recognizes the gentleman from California, Mr. Hosmer.

Mr. HOSMER. I reserve my time, Mr. Chairman.

Mr. ASPINALL. The Chair recognizes the gentleman from Colorado, Mr. Chenoweth.

Mr. CHENOWETH. I thought I understood from Mr. Hamilton that the water from this project would be put on new lands. Is that correct? I thought he said there was no supplemental water for land that is already being cultivated—that this is going to be new land.

The reason I ask that I got the impression from the last witness that you got desperately short of water and he mentioned the different amounts of oranges, lemons, and so forth, in different years. So my curiosity is aroused as to why you do not use some of this water on lands you already have in cultivation.

Mr. PURVIS. If I may answer that, it would be our intention to make this water available to any part of the district where it is needed.

Mr. CHENOWETH. As a matter of fact, that becomes very valuable water, does it not? It means the difference between a crop and no crop at all.

Mr. PURVIS. It surely does.

Mr. CHENOWETH. Is not that what you are trying to do with this project?

Mr. PURVIS. That is right.

Mr. CHENOWETH. In other words, avoid these heavy losses that have been recurring from year to year in prior years?

Mr. PURVIS. Yes, sir.

Mr. CHENOWETH. It is not altogether a matter of reclaiming new lands?

Mr. PURVIS. No.

Mr. CHENOWETH. I got the wrong impression from Mr. Hamilton then. I thought the water was entirely for new lands.

Mr. PURVIS. I showed a picture of an orchard that was lost because of lack of water. You can see the pump in one of the closeups, and

they shot across it to show there was nothing else to pump out of the ground in that particular vicinity.

Mr. CHENOWETH. How much of the water would you say would be used for supplemental purposes and how much on new lands? Do you have any idea?

Mr. PURVIS. I do not on that; no, sir.

Mr. CHENOWETH. Would most of it be used for land now in cultivation?

Mr. PURVIS. Could I ask our engineer to answer that question?

Mr. CHENOWETH. Yes.

Mr. BENNETT. Mr. Hamilton stated approximately 4,000 acres are now under irrigation in the area. As Mr. Ensch pointed out, during the series of dry years the water table in this very limited Ojai Basin is pulled down to a point where less favorable pumping areas cannot get water. I believe 2,000 acre-feet is considered the short-term deficiency for supplemental purposes.

Mr. CHENOWETH. Are you going to have enough water to provide supplemental water to the land under cultivation and also reclaim 11,000 acres of new land?

Mr. BENNETT. That is correct.

Mr. CHENOWETH. You are going to have enough water through this reservoir to accomplish that?

Mr. BENNETT. That is right.

Mr. ASPINALL. The Chair recognizes the gentleman from California, Mr. Sisk.

Mr. SISK. I would just like to say to these gentlemen that I commend them on a very excellent statement. I have had opportunity on several occasions to drive through your area and particularly through the beautiful Ojai Valley. I had hoped to needle my good friend from Florida a little bit with reference to the quality of the food we grow. He was speaking of quantity. I think you gentlemen could certainly more than match him on quality.

I yield the balance of my time to the gentlewoman from Idaho.

Mr. ASPINALL. The Chair is very appreciative of that. He hated to stop the lady a while ago.

Mrs. PFOST. Thank you.

I notice, Mr. Purvis, that you said in your concluding paragraph:

> The current drought period has now continued for some 10 years. It is reasonable to expect a period of normal rainfall to commence before very many more years pass. We need to have a reservoir ready to conserve that runoff.

Does that mean you would have very little water to store should you have a reservoir constructed at the present time? In other words, you have not been having a runoff each year for the past 10 years.

Mr. PURVIS. Nobody knows what kind of a runoff we will have this coming winter. It might be nothing. We have had years when there was 7 inches of rain and practically not a drop ran off. Then there have been other years—in 1941 it is estimated 250,000 acre-feet of water wasted to the ocean in our little district, which would be an amount sufficient to fill this large reservoir. So we might have a lot, we might have a little.

The thing we would like to point out in that particular statement is that we have been going through a drought period for some time. We may get to the end of it soon, and when we do there will come a

wet period. If we had our reservoir built we would be sitting pretty from then on. If we happened to build it at the beginning of a dry period, it might sit there for quite a while without any water in it.

Mrs. PFOST. What about the storage? What amount of storage would you have averaged over the past 10 years had you had a reservoir there?

Mr. PURVIS. The Bureau estimates—this is hard for me to believe, but I know it must be true—that even though they would build the reservoir at the beginning of the dry period it would gradually fill up, although it might take as much as 20 years to do it. But if they built the reservoir at the beginning of a wet period, it would probably fill up in 5 years. Does that answer your question?

Mrs. PFOST. Yes; I think it does.

Thank you, Mr. Chairman.

Mr. ASPINALL. The Chair recognizes the gentleman from California, Mr. Utt.

Mr. UTT. I just have two questions.

Can you give me the assessed valuation of zone 1, Mr. Purvis?

Mr. PURVIS. The assessed valuation of zone 1 is approximately $190 million at the present time.

Mr. UTT. The second question is: Do you have an extraction tax in zone 1 for water extraction?

Mr. PURVIS. I do not think I can answer that. Shall we refer that to the attorney?

Mr. WILLARD. The answer is "No."

Mr. UTT. Are not there going to be several pumps in this area that will be fed from the underground which will get considerable advantage of this expenditure of money by the raising of the water table?

Mr. PURVIS. There probably will be.

Mr. UTT. And will you consider an extraction tax on those pumps which get an underground benefit?

Mr. PURVIS. We have not up to the present time. I know what you are referring to now. I have heard it talked about. But if I could offer my own feeling on it, it would be a very difficult tax to levy and operate.

Mr. UTT. I question that. In Orange County we have a $4.50 an acre-foot extraction tax to those who get the benefit of the water we buy from Metropolitan and dump in the underground basin. It is not so difficult to administer, and it would seem to me it would be something for the district to consider in helping them to retire the obligation.

Mr. PURVIS. Thank you.

Mr. ASPINALL. The Chair has one question to ask Mr. Purvis, and that is with reference to page 6 of your statement where you referred to the financing of the project. As I understand, the import of your statement is that you consider the project feasible providing you can get the interest-free money that the reclamation program would permit, but if you had to finance it through ordinary financing methods it would become too costly and would be difficult for you to carry. Is that correct?

Mr. PURVIS. Yes, sir: that is my understanding of it. We can sell water at the rate Mr. Hamilton has indicated, and the groves and

other crops can be raised providing the water is sold at that figure. But it would be greatly increased if we had to pay interest on the irrigation part and probably that would not be feasible for agricultural purposes. It would for municipal and industrial purposes, however.

Mr. ASPINALL. The Chair also understands that even though you have a very wealthy district at this time there is a possibility that the wealth might diminish, and because of that it would be rather difficult to float long-period bonds in order to take care of the construction costs of this project. Is that correct?

Mr. PURVIS. The Avenue oilfield is one of the oldest oilfields in the United States, and the oil, unlike water, is not replenished annually, and it is bound to run out sooner or later. As oil production declines, our tax revenues will decline, too. We anticipate that our other industries perhaps will grow. There is only one thing that stands in the way of their coming in at the present time, and that is we have no water to offer them.

I think it is a very important point for our little district to consider, and that is their future economy. We have all these people coming in and do want to come in. But unless some industry is maintained, ours can be a work-short area.

Mr. ASPINALL. You would say that my information about the difficulty of floating a bond issue is correct?

Mr. PURVIS. It is absolutely correct.

Mr. ASPINALL. Off the record.

(Discussion off the record.)

Mr. ASPINALL. Mr. Teague, do you have anything further?

Mr. TEAGUE. I would just like to state to the gentlewoman, if I may, that I understand only 4 or 5 residences will be in the area where we expected to be inundated. One belongs to Roy Pinkerton, who is here.

I would like to say that all predictions, all prognistications of the weather people are that we are about at the end of the dry cycle and about to enter into a wet cycle again. That is why we are so anxious to get the project underway—so that the project will fill up quickly.

Mr. Chairman, I have a few more resolutions and letters that I would like to introduce for the file.

Mr. ASPINALL. They will be received under the same understanding as the ones offered previously.

Mr. TEAGUE. Thank you for your courtesy and kindness.

Mr. ASPINALL. I thank you and the people who appeared here for having this matter so well in hand that we were able to finish our assignment this morning.

We shall await the final report of the Bureau of Reclamation, and as soon as we have that we shall try to find time in order to give our final decision.

The committee is adjourned.

(Whereupon, at 12 noon, the subcommittee adjourned to reconvene at the call of the Chair.)

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